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ONE STEP FORWARD

The report of the first Conference of
Basic National Education, Poona
October 1939

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HINDUSTANI TALIMI SANGH
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मेरी इच्छा है कि पुना
पवित्र हो नयीतालीमका
अध्यापनको पूरीतरह
समझमें रख कर ही
चलेगी. जैसे सत्य अहिंसाकी
प्रयोगोंमें हम कामयाब
नहीं हो सकते हैं ऐसे
ही इस प्रयोगमें कामयाबी
चाहिये. नयीतालीमका
अध्यापन यह है कि
तालीम कुछ भी [illegible]
उद्योग मारफत ही
[illegible] तालीममें
[illegible]
काम नहीं होता है

सेगांव-वर्धा
२८-१०-३९

मो. क. गांधी

FOREWORD

A friend of mine, writing to me recently from England about the horrors of modern warfare, remarked: "Though the world of men may be in chaos the world of God goes steadily through the appointed seasons and it is a marvellous lesson in faith and patience to witness all the yearly miracles happen when nothing else around us seems stable."

Patient striving in the service of a more humane and more creative vision of education is somewhat akin to this quiet march of the seasons in the world of God, while the world of man is darkened with violence, suffering and injustice. But with a difference. The glorious procession of seasons is indifferent to the march of events in the human world. Spring comes and its luxuriance covers up the havoc wrought by the diabolical ingenuity of man in the fields and the plains; the autumn tints envelop, like a mantle of beauty, the scarred battlefield as well as the quiet countryside. But education can never be indifferent to, or unconnected with, the tragedy and the triumphs of human life, it is bound up with all the anxious problems which weave the texture of human destiny. It is, in its wider meaning, the most important creative and constructive activity of man which attempts to conserve his past achievements, to prepare him for his present life and plan out for the race a future which may not be beset with the frustrations of the past. It goes on, and should go on, even when destructive forces get the upper hand in the world of human affairs; in fact, in such times, the necessity of stressing the right values for which true education stands, becomes more imperative.

It was under the shadow of the war in Europe and of an anxious and critical political situation at home that the first Conference of Basic National Education was convened by the Government of Bombay at Poona in October, 1939. It goes to the credit of the conveners and organizers of the Conference that neither the national nor the international situation deterred them from the duty of taking stock of what

the workers of basic education had achieved in the course of their first year's work. It their sense of values had been perverted, they should have considered the question of children's education too insignificant to divert their attention from the big political issues. But they obviously realized that, if the future of humanity is to be safeguarded from the poison that embitters and the perils that threaten it, it is necessary to strengthen the creative movements which aim at producing individuals with a better developed sense of co-operation and social justice. The scheme of basic education would be dangerously misinterpreted if it is looked upon as merely a method of instruction or as an attempt at introducing some craft work in education. This would be to cut it off from its ideological moorings. Its true importance lies in its insistence on human and social values—on giving children, through crafts and productive work, a lively sense of kinship with their fellow-beings, on developing inter-cultural understanding and appreciation through the proper presentation of social studies and training them for practical citizenship through co-operative work and opportunities for social service.

This report will give the readers not only a conception of the creative and humane ideology which has inspired this scheme of educational reconstruction but also present to them the practical problems which have arisen in the course of the work. These problems were discussed by the Conference with a critical alertness which should disarm and reassure those who were afraid that the scheme of basic education might petrify into an unquestioned, sancrosanct dogma. It would also reveal that, during this brief period, the movement has made gratifying headway and won a measure of recognition, both in this country and abroad which must be a source of encouragement to all its well-wishers. It has, no doubt, come in for a considerable measure of criticism. But this, in my opinion, is to be welcomed rather than resented. For, in so far as the criticism is based on a misunderstanding of the principles or the bonafides of its originators, it is *our* business to dispel it both through proper elucidation towards which this report should make a welcome contribution, and through a *practical* demonstration of the spirit in which it should be worked out. There is nothing further from the

mind of those who have formulated the scheme and syllabus of basic national education than the desire to impress any rigid and uniform cultural pattern on the people of this great country. For, in their diversity lies their richness and in the successful working out of a harmony, which does not suppress this diversity, lies their salvation. In so far as intelligent criticism relates to technique, it should be welcomed and our methods should be constantly revised and evaluated with reference not only to such criticism but also with reference to the results achieved. It is essential, no doubt, to have faith in the ideology of a social order which is just, co-operative and humane; but it is equally essential to have the outlook and mental alterness of the scientist in devising methods and means.

I should like to invite the attention of the readers particularly to the section of the report dealing with the Exhibition. This would be a revelation to those who are sceptical of the artistic talents of children in our schools and think that craft work in schools is nothing more than a fad. What struck me as particularly pleasing was the successful attempt made in most of the schools to introduce the element of art into children's craft work, thereby warding off the danger that craft teaching may degenerate into unrelieved and monotonous manual work and thus lose a great deal of its educative value.

I am confident that the perusal of this report will help to make the movement better known to those who have, for one reason or another, not been able to get a clear idea of its aims and methods and, for those who are actually engaged in it, it will provide an authoritative picture of the present position and immediate prospects.

K. G. Saiyidain
Director of Education
Jammu & Kashmir State

THE PROGRESS OF BASIC EDUCATION

E. W. Aryanayakam

Secretary, Hindustani Talimi Sangh.

The report of the Poona Conference has been called "One Step Forward". The title is borrowed from Gandhiji's writings. Writing of the Wardha Educational Conference of 1937 in 'Harijan' (2-10-37), he described it as "A Step Forward". Those of us who attended or took part in the Poona Conference had similar feeling that in the interval between the Wardha and the Poona Conference, Basic Education had taken another step and rather a big step forward.

The educational and social significance of this step will be evident from the report of the Conference and the Exhibition. I shall attempt here to give a short account of the progress of the actual experiment of basic education during the past year and a half.

Central Provinces: The scheme of basic education known popularly as the Wardha Scheme of education had its origin geographically in the Central Provinces, and this province was the first to take up the experiment of basic education. In March 1938, the C. P. Government appointed a Committee with Dr. Zakir Hussain as President to draw up a syllabus in accordance with the Haripura Congress resolution on national education. The syllabus submitted by the Committee and accepted by the Government is the same as the syllabus of Basic National Education, except for certain minor changes to suit local conditions. Before the Committee had completed its work, however, an interim report was published and on 21st April 1938, a training school was opened at Wardha to prepare one hundred and sixty teachers for the Vidya Mandirs which the Government proposed to open for the spread of basic education in the villages of the province.

This institution, with the attached practising school, was the first experimental centre where the principles of basic education through handicrafts were put into practice. The first batch of pupil teachers completed their training in De-

cember, 1938, and were sent out for practical teaching experience to one hundred and sixty District Council Schools in the Districts of Wardha, Nagpur, Rajpur and Jubbulpore.

In the meantime, one hundred and sixty District Board teachers were sent to undergo a short training of two months which was further extended to five months at the Vidya Mandir Training School at Wardha, to continue the work in Grade I, according to new lines after their return.

In April 1939, nearly 98 Vidya Mandirs were opened in different districts of C. P. and 100 newly trained teachers were sent to these newly opened schools to initiate the experiment of basic education; the remaining sixty were absorbed in the District Board schools, and practising schools attached to normal schools.

The report of the Educational Re-organization Committee was published and basic education was adopted as the official system of education. The Government therefore had to consider the steps necessary for the speedy introduction of the new syllabus. The Wardha district has been selected as the first compact area for the experiment and the District Board teachers are being re-trained at the Vidya Mandir practising school in batches for short periods of 5 months.

The next problem was the conversion of the existing normal schools into basic training schools. A central training college, called the Vidya Mandir Training Institute, was opened at Wardha to re-train a certain proportion of the normal school teachers together with some trained teachers from the high schools. All the practising school teachers of the province are at the same time being re-trained at the Vidya Mandir Training School in two batches, and it is hoped to transform all the normal schools in the province into basic training schools within a reasonable period with the help of re-trained teachers as the first step towards the introduction of basic education on a province-wide scale. The necessary financial and administrative adjustment for this re-training was made possible by stopping the admission of first year students in all the normal schools of the province.

The re-training of the supervisory staff forms another important item in the programme of basic education, as the efficient working of the scheme depends to a great extent

on trained and sympathetic supervision. All the district inspectors of the province attended a three weeks' short training course organized by the Hindustani Talimi Sangh at Wardha, and all the Assistant District Inspectors went through a refresher course at the Vidya Mandir Training School.

The problem of the preparation of the necessary literature is now under consideration, and the necessary reading material is being prepared at the Vidya Mandir Training Institute.

United Provinces: In March, 1938, the Government of the United Provinces appointed a Primary Secondary Reorganization Committee. In its "Interim Proposals" this Committee recommended to the Government the adoption of the system of basic education and the organization of the training of teachers as the first step in this programme. Two training centres were opened by the Government in August 1938, one at Allahabad for the training of men graduates and the other at Benares for the training of women teachers. The latter has since been transferred to Allahabad and placed under the charge of the Principal, Basic Training College, Allahabad. Dr. I. R. Khan, the Secretary to the Re-organization Committee, was appointed as the Principal of the Basic Training College and Special Officer of Basic Education and was placed in full charge of the new experiment. In September, 1938, a basic school was attached to the Training College at Allahabad as a practising school, and the crafts of spinning and card-board work and gardening were introduced in Grade I. From January, 1939, a refresher course was also organized at the Basic Training College to train a selected number of District Board teachers.

The report of the Re-organization Committee was published in March 1939 and basic education was adopted as the official policy. The problem of the reorganization of primary schools and the re-training of existing primary school teachers was undertaken in real earnest.

From May 1st, 1939, seven refresher training centres were opened at the headquarters of the Inspectors of Schools, viz. Meerut, Agra, Bareilly, Allahabad, Benares, Lucknow and Fyzabad to give short refresher courses in the theory and practice of basic education to 250 teachers from the District

Boards and municipalities in each of the circles. The centres were placed in charge of the inspectors of schools and the graduate teachers and primary teachers trained at the Basic Training College, Allahabad, to conduct the refresher courses. The first refresher course was conducted from May 1st to July 30th and on August 15th the new experiment was initiated in the first grades of 1750 selected District Board and municipal schools.

In the introduction of the new experiment the District Boards and municipalities have offered the fullest co-operation to the Government. While the cost of training, including a stipend of Rs. 5 per month to each teacher under training, has been met by the Government, the District Boards and municipalities are meeting the additional expenditure on salaries and travelling expenses of teachers under training, and on craft and other equipment for the working of the new syllabus.

The future programme is not to expand the scope of the experiment beyond the present number of schools, but to consolidate and extend the work already initiated. The teachers deputed for training in February, 1940, will on completion of their refresher courses be engaged to start class II on the new lines from July 1940. In the meanwhile another batch of 106 graduate teachers is being trained in the Basic Training College. This batch will replace the present staff of the refresher centres after completing their training and the first batch will come back to the training college for a further training to enable them to prepare teachers to teach Grades III, IV and V, according to the new syllabus. This process will be repeated until it is expected that during the course of the next four years there will be trained staff, competent to teach the seven grades of the basic course.

The problem of efficient supervision and the necessary educational literature is also being tackled. An intensive refresher course of two months was organized at the Basic Training College, Allahabad, for the Sub-Divisional Inspectors of the province, and the necessary literature for teachers and children is under preparation. An interesting aspect of the experiment in the U. P. has been emphasis on art training as an essential part of the new syllabus. A further account

of this experiment will be found in the main body of the report.

Bihar: In Bihar, basic education has been introduced as an experimental measure and not as the official educational policy of the Government as in the U. P. and the C. P. A Board of Basic Education, with the Hon'ble Minister of Education as Chairman* was appointed to chalk out a programme of basic education in the province and be responsible to the Government for all the work connected with the introduction of basic education. The Patna Training School was converted into a basic training centre in September 1938 to train 60 pupil teachers. The headmaster of the Training School was appointed as the Secretary of this Board, and also the Special Officer of Basic Education.

The Board selected a compact area in Bettiah thana of the Champaran district, being a very backward area, as the first field of experiment, and 35 new schools were opened in April, 1939, with the help of the 60 newly trained teachers. A staff of two supervisors and one organizer was appointed to guide and direct the academic and administrative work of the compact area. These schools are Government schools and the entire cost of buildings, equipment and salaries of teachers and supervisors is being met by the Government. A second batch of 60 pupil teachers were admitted for training in July 1939 and the future programme of basic education is to extend the experiment year by year in the newly started schools in the compact area until the full seven years' syllabus of basic education is worked out in full and all the schools are converted into 'seven grade basic schools.'

A Literature Sub-Committee was appointed by the Board for directing the preparation and publication of the necessary literature of basic education. The task of re-training of the supervising staff has also received the attention of the department and a short refresher course of three months was organized at the Basic Training School for training the Sub-Inspectors.

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*Mr. Cousins, the Adviser to His Excellency the Governor on Education, has been appointed as the Chairman of the Board after the resignation of Congress Ministry.

Bombay: In the Bombay Presidency, as in Bihar, basic education has been introduced as an experimental measure in selected compact areas. In November 1938, a Special Officer of Basic Education was appointed to organize the experiment, and a Board of non-official members, with Sjt. Narahari Parikh of Harijan Ashram, Sabarmati, as Chairman, was appointed to help the Special Officer in his work to advise the Government on matters relating to basic education.

Four small compact areas in the three linguistic provinces of Maharashtra, Gujarat and Karnatak were selected for the experiment, and three centres were started in February 1939 in Loni (Maharashtra), Ahmedabad (Gujarat) and Dharwar (Karnatak) to train the required number of teachers. Since then the training centre of Gujarat was transferred to Katargam, in Surat District, now the compact areas of experiment. A new compact area for Urdu schools was selected in East Khandesh, and a new training centre for Urdu teachers was opened in Jalgaon.

In the Bombay Presidency, as in the U. P., the experiment is being conducted through the re-training of existing primary school teachers and by the gradual conversion of existing District Board schools. From June 1939 basic education has been introduced in Grades I and II and the pre-basic or infant classes in 59 schools in the four compact areas and in 28 isolated schools with the help of the re-trained Local Board teachers. The future programme is to restrict the experiment to the compact area schools and isolated schools where it has been already introduced, and to extend the training of teachers and the introduction of basic education at the rate of one standard per year until the whole syllabus is worked out.

The experiment is at present being carried out, as in the U. P., under dual control; the academic work is controlled and checked by the Education Department; the administration is under the control of the local authority. As regards the finances the District Boards are meeting the additional expenses on craft-equipment and material. The department is meeting the full expenditure on the training of teachers together with the additional expenditure on the experiment,

including the salaries of additional teachers and the supervising staff.

The work of supervision has been adequately and efficiently organized, and one Basic Supervisor with one or two Craft Supervisors have been appointed for 15 to 20 schools in each compact area to guide and supervise the new experiment.

The preparation of the necessary educational literature is also receiving the attention of the Board, and the necessary material is being collected from the training schools and compact areas.

Orissa: In Orisa, a Basic Education Board, with Sjt. Gopabandhu Chowdhuri as Chairman, was appointed by the Government to take the necessary steps for the introduction of basic education as an experimental measure. A Special Officer, recruited from the inspectorate of the Education Department, of Basic Education was appointed to act as the Secretary of this Board. The Board selected a compact area in Jajpur thana in District Cuttack as the first field of experiment, and a training centre was opened in May 1939 in the village Bari as the centre of the compact area selected. Twenty seven teachers completed their training in December 1939 and fifteen basic schools were opened in the compact area in February 1940. The unique feature of the experiment is that the training school will also serve as the centre of the experimental area, and the Special Officer of Basic Education will supervise and conduct the experiment with the help of the staff of the training school.

Madras: A Basic Training School was opened at Coimbatore by the Madras Government in July 1939 to train teachers for the Southern districts of the Presidency, and the training centre at the Andhra Jatiya Kalashala was officially recognized for the training of teachers for the Northern districts. No other steps have been taken by the Government so far for the introduction of basic education in the Presidency.

Kashmir: Besides the provinces already mentioned, valuable work in the practical application of the scheme of basic education is being done in the State of Kashmir under the able guidance of Professor K. G. Saiyidain, the Director of Education. A training centre was opened at Shrinagar

to train 102 teachers of basic education and two experimental basic schools were opened at Jammu and at Shrinagar. On completing their course of training in April 1940, the teachers will start work in 60 basic schools.

Besides these steps taken by the different governments and State of Kashmir, a few national institutions have been trying to conduct experiments in basic education both in the training of teachers and the education of children.

All independent educational institutions suffer from various handicaps, particularly if they are engaged in a new educational experiment. There are not adequate funds available for carrying out the experiment successfully, there is no official patronage and no prospects before the trained teachers. On the other hand, it is only in such independent institutions where one may expect to see the scheme carried out in the true spirit. Two of the earliest training centres of basic education were opened by national institutions Jamia Millia Islamia of Delhi in the north and Andhra Jatiya Kala-shala (National College of Masulipatam) in the south. Both these centres have completed the training of one batch of students and have started on the training of a second. The training centre at Masulipatam has since been officially recognized by the Government of Madras. Another national institution with a long record of khadi and other constructive work which has taken up the work of training teachers of basic education this year is the Vedchhi Ashram (Distt. Surat, Gujarat).

Similarly, there are a few basic schools conducted by private individuals and institutions in different parts of India which are making valuable contribution to the experiment of basic education, such as the Basic School at Tagadur (Mysore), a compact area of four village schools round Saswad (near Poona) run by the Tilak Maharashtra Vidyapith, Poona, two schools run by the Friends' Settlement at Rasulia, Hoshangabad District C. P. A description of three other typical basic schools—the Rashtriya Gramshala at Thamna (Gujarat), the Basic School at Segaon, and the Vijay Vidyamandir of Rajpipla will be found in the main body of the report (Basic Syllabus in Practice).

It is evident from the brief description outlined above that the scheme of basic education is no longer a theoretical proposition, but an established educational process trying to work out its own technique, create new literature and evolve a new organization in different parts of India. It is difficult to give exact facts and figures regarding the experiment, but even an approximate idea of the variety and extent of the experiment may be of interest.

Today we have in all 14 training centres and seven refresher course centres working in different parts of India, training or retraining teachers of basic education.

These training centres are distributed as follows:

Government Training Centres.

	Province	Medium of Instruction
1. Basic Training School, Patna	Bihar	Hindustani
2. Basic Training College, Allahabad	U.P.	Hindustani
3. Basic Training School, Bari	Orissa	Oriya
4. Basic Training School, Loni	Maharashtra	Marathi
5. Basic Training School, Katargam	Gujarat	Gujarati
6. Basic Training School, Dharwar	Karnatak	Kanarese
7. Basic Training School, Jalgaon	Khandesh	Urdu
8. Vidya Mandir Training School, Wardha	C.P.	Marathi and Hindi.
9. V.M. Training Institute, Wardha	,,	,,
10. Basic Training School, Coimbatore	Madras	Tamil
State		
11. Basic Training School, Shrinagar	Kashmir	Urdu
National Institutions		
12. Basic Training Centre, Jamia Millia Islamia	Delhi	Urdu
13. Basic Training Centre, Andhra Jatiya Kalashala	Masulipatam	Telugu
14. Vedchhi Ashram	Gujarat	Gujarati

Besides these, we have seven training centres in the U. P. alone giving a short refresher course of 2½ months' duration to 250 primary teachers from District Boards and municipalities in each of the centres.

1. The total number of teachers trained		
	(in training schools)	650
	(in refresher training centres)	5,200
2. The total number of teachers under training		
	(in training schools)	720
	(in refresher training centres)	1,750
3. The total number of children studying in Grades I and II of the Basic course		
	approximately	25,000
4. The total amount of yarn spun*, average count, 10		47 maunds 12 seers

This is as regards the exterior form and contents of the experiment. Its most significant characteristic as an educational experiment has been the lack of a mechanical uniformity. Each centre of experiment is working out its own technique and methodology and making its own contribution to the practical aspect of basic education. This variety is a sign of new life and is a welcome feature of the new experiment. However much the institutions and workers of basic education may differ in the details of practical working out of the scheme, the discussions in the Conference and the records in the Exhibition proved that they agreed on a few fundamentals. In the first place, education through productive work, instead of proving an exploitation of child labour as had been feared by some educationists, had proved to be a joyous and liberating process of education both for the children and their teachers. It had brought a new sense of self-confidence in the life of the children, and a refreshing atmosphere of healthy disciplined freedom in the life of the school.

Secondly, the tentative, syllabus of basic education, after a year's experience of actual working had been found both practicable and workable, and the standard of attainment laid down for craft work and other academic subjects correlated to the basic craft found to be well within the capacity of chil-

*This excludes the amount spun in 5,200 schools in the U. P. and 100 Vidya Mandirs of C. P. figures for which records have not been received.

dren of the given age group, within the prescribed time. There had been a great deal of doubt and misgiving about the new educational method suggested, viz. the method of giving knowledge to a child though a basic craft. Actual experiment proved, however, that through the details of the new method have to be worked out from day-to-day work in the training schools and basic schools, the method of correlated teaching was a natural and psychological method, and the different processes in the basic craft together with the physical and social environment of the child provided ample opportunities of teaching all the necessary school subjects to the children.

The Conference and the Exhibition has finally lifted the scheme of basic national education above the realm of controversy and proved to the educational world that as regards the fundamental principles, contents and method, the claims of this new education are justified by a year's experience of work with the teachers and children. Thus it was that we borrowed the title from Gandhiji and called the report 'One Step Forward'. This report is published and placed before the public, especially those who are interested in the reconstruction of education, in the hope that it may prove to be helpful in the understanding of this new venture in national education.

Segaon
March 3rd, 1940

CONTENTS

Message by Gandhiji — in facsimile — iii

Foreword, by Prof. K. G. Saiyidain, President of the Conference — v

Progress of Basic Education
E. W. Aryanayakam, Secretary, Hindustani Talimi Sangh — viii

PART I

I. Opening of the Conference
- A. A. welcome address by Shri B. G. Kher, Chairman of the Reception Committee — 3
- B. Inaugural address by Acharya J. B. Kripalani — 15

II. Conference at Work
- A. Presidential address by Prof. K. G. Saiyidain, Director of Education, Kashmir — 35
- B. Discussions of the Conference
  1. The Training of Teachers, First Session — 43
     " " Second Session — 62
     " " Third Sesison — 66
  2. The Technique of Correlated Teaching — 76
  3. The Financial and Administrative Problems of Basic Education — 119
  4. The Basic Syllabus in Practice — 148
  5. The Supervision of Basic Education — 175
  6. Findings of the Conference — 186

PART II

Interpretations of Basic Education

1. The Ideology of Basic Education
   Prof. K. G. Saiyidain — 195
2. A Note of Warning
   Acharya J. B. Kripalani — 207

3. A Scientist looks at Basic Education
Prof. N. R. Dhar, Deputy Director of Public Instruction U.P. 213

4. An Educationist looks at Basic Education
Mr. John Sargent, Commissioner for Education, Government of India 222

5. Impressions of the Conference
Mrs. A. E. Harper, Moga (Punjab) 227

PART III

The Exhibition

1. The Exhibition of Basic Education: its Possibilities and Achievements
Smti. Asha Devi, Secretary, Hindustani Talimi Sangh 233

2. The Significance of Craft Records
Shri Vallabhbhai, Nalwadi Ashram 241

Appendix

List of names and addresses of delegates and invited guests 245

PART I

PROCEEDINGS OF THE CONFERENCE

OPENING OF THE CONFERENCE

The Conference and exhibition were opened by Acharya J. B. Kripalani on October 29 at 5 P. M.

The proceedings started with a prayer and welcome song in Marathi by girl students of the practising school attached to the Men's Training School at Poona.

Shri B. G. Kher, Chairman of the Reception Committee, next welcomed the delegates and visitors to the Conference.

Address by the Chairman of the Reception Committee

Acharya Kripalani, brother delegates, ladies and gentlemen: as Chairman of the Reception Committee of this unique conference, my first duty is to offer you a very cordial welcome to this historic city of Poona. No one is more painfully aware of the shortcomings of the arrangements which we have made for your reception, but the fact is that I myself arrived in Poona only this evening, just about the same time as most of you did. I am, however, perfectly certain that you will be so generous as to put up with the inconvenience which you are bound to suffer. I extend to you a very cordial welcome.

At the outset, I should like to read a message which we have received from Mahatma Gandhi. It is a happy augury for the success of the Conference that we have received such an inspiring message from the originator of the idea of basic education.

GANDHIJI'S MESSAGE: "*I hope that the Poona Educational Conference will, in all it does, keep steadily in view the newness of the Nai Talim, rendered in English as Basic Education. Just as we may not trifle with a chemical experiment by discarding its formula similarly we may not trifle with the essentials of the Wardha Scheme. The uniqueness of this scheme is that Education is to be given through village crafts. The end in view is not to be accomplished by merely adding a village craft to the current syllabus.*"

Two years ago most of us present here met at Wardha to discuss this new scheme of education called the Wardha Scheme which now goes by the name of the Basic Education Scheme. At Wardha it was mostly an academic discussion with regard to the possibilities of introducing craft as the central subject in the system of education. The whole question arose, as you know, when the problem of financing universal primary education in the country confronted the Congress Ministries. It was then that Gandhiji wrote several articles in the Harijan and propounded the theory of making education self-supporting and at the same time useful to the child, who should be able to make proper use of it in after life. Gandhiji wrote in the Harijan to the following effect:

"But as a nation we are so backward in education that we cannot hope to fulfil our obligations to the nation in this respect in a given time during this generation, if the programme is to depend on money. I have therefore made bold, even at the risk of losing all reputation for constructive ability, to suggest that education should be self-supporting. By education I mean an all-round drawing out of the best in child and man—body, mind and spirit. Literacy is not the end of education nor even the beginning. It is only one of the means whereby man and woman can be educated. Literacy in itself is no education. I would therefore begin the child's education by teaching it a useful handicraft and enabling it to produce from the moment it begins its training. Thus every school can be made self-supporting, the condition being that the State takes over the manufactures of these schools."

This bold statement gave rise to a great deal of controversy and to a regular cannonade of writings attacking the idea of making education self-supporting by exploiting child labour, as the critics called it. A conference was then called at Wardha to discuss the entire question. As a result of the discussions, a committee was appointed with Dr. Zakir Husain as Chairman. This Committee shifted their emphasis from the self-supporting idea and enunciated the principle of education through a creative activity which may be a craft. The self-supporting idea was pushed to the background. It was to be incidental and not the main part of the new scheme of education. The Committee criticized the system of education in

vogue as something which has "failed to meet the most urgent and pressing needs of national life, and to organize and direct its forces and tendencies into proper channels."

"Today when quick and far-reaching changes are reshaping both national and international life and making new demands on the citizens, it continues to function listlessly and apart from the real currents of life, unable to adapt itself to the changed circumstances. It is neither responsive to the realistic elements of the present situation nor inspired by any life-giving and creative ideal. It does not train individuals to become useful productive members of society, able to pull their own weight and participate effectively in its work. It has no conception of the new co-operative social order which education must help to bring into existence, to replace the present competitive and inhuman regime based on exploitation and violent force. There is, therefore, a demand from all sides for the replacement of the present system of education by a more constructive and human system which will be better integrated with the needs and ideals of national life, and better able to meet its pressing demands." The new system of education as propounded, aims at turning children into useful citizens who will be capable of "exercising with intelligence their rights and duties as citizens, who as active members of society will be able to repay in the form of some useful service what they owe to it as members of an organized civilized community; it aims at producing workers and not drags and parasites, whether rich or poor, who will look upon all kinds of useful work including manual labour, even scavenging, as honourable and who will be both able and willing to stand on their own feet." The Committee framed a tentative syllabus for basic education in order to incorporate these aims and ideals. Since then various educationists have approved of the new scheme. The Central Advisory Board of Education also examined the scheme and has accepted the principle of education through some creative activity as sound. We have now passed the stage of mere academic discussions. We meet here today after two years to compare notes as to what our experience has been in carrying out this principle wherever it has been introduced. While the principle is sound the method or methods to be employed in implementing it, are still in

an experimental stage. We also come across difficulties which cannot be overcome in a day. I shall, therefore, tell this Conference what we have done in Bombay and what are the problems that confront us.

It was in last November that we appointed a Special Officer to organize the work of basic education in the province. We also appointed a Board of Basic Education to advise Government and help the Special Officer in his task. With their advice, we started the experiment in four compact areas and opened about twenty schools in Dharwar Taluka, ten schools in Khandala Peta, Satara District, ten schools in Parola Taluka, East Khandesh District and about twenty schools in Valod Mahal, Surat District.

To prepare teachers for work in these schools, a few selected graduate teachers from the training schools and secondary institutions were sent to Delhi for about eight days and some more to Wardha in January 1939 for about three weeks, where a short course of training was specially organized for them by the Hindustani Talimi Sangh. These teachers were divided into three batches and three short-term training courses were organized for training teachers for basic schools in compact areas. The number of teachers trained in these courses is:

Linguistic area	Place of training	Number of teachers trained
Karnatak	Dharwar	48
Maharashtra	Loni	49
Gujarat	Ahmedabad (Gujarat Vidyapith)	32

The training centres at Dharwar and Loni were run independently by Government, with substantial help from Tilak Vidyapith in the latter, and the training centre at Ahmedabad was run by the Gujarat Vidyapith authorities with the help of some departmental men. The training given to the primary teachers consisted of craft (spinning and carding), history of national awakening, principles of Basic National Education, syllabus for standards I and II in basic schools and principles of correlated teaching. By the end of May 1939, 129 teachers were ready for work in basic schools and from June, basic

education has been introduced in standards I and II of 58 schools in the province as under:

Kannada Schools	17	including a practising school at Dharwar.
Marathi Schools	21	" " at Loni.
Gujarati Schools	14	" " at Katargam.
Urdu Schools	6	

Training Facilities for the Supply of Trained Teachers: To keep up the supply of trained teachers for the schools working from June 1939 and to supply teachers to other districts wishing to introduce basic education in some of their schools, independent training centres were started at three places. A specially drawn up syllabus to be covered in one year has been drawn up and the teachers undergoing this training will be entitled to a Second Year Training Certificate. Only first year trained teachers or matriculates are admitted to this course. Training is given to them in the following subjects:

Craft (spinning and carding).

Language (mother-tongue and Hindustani).

History (including civics and history of national awakening).

Geography.

Science.

Rural uplift work.

Drawing.

Principles of Basic National Education and psychology.

Practice teaching in schools.

Every training institution has a practising school attached to it, and pupil teachers give practice lessons under the supervision of the staff of the training centres.

In June, it was felt that an independent training centre for Urdu teachers was also essential and that a compact area for Urdu schools was desirable. Accordingly an Urdu Basic Training Centre was started in July and it has been proposed to introduce basic education in eleven Urdu schools in Yawal Taluka of East Khandesh from June, 1940. The basic training facilities in the province are:

Training Centre	Language	Number of teachers under training	Staff Full time	Staff Part time
Dharwar	Kannada	38	5	3
Loni (Poona)	Marathi	67	6	4
Katargam (Surat)	Gujarati	50	5	4
Jalgaon	Urdu	30	4	3

Teachers are selected for admission to these training centres on the recommendation of the Administrative Officers of the Local Authorities and care is taken to see that they have a liking for work in basic schools and are well-inclined towards it. Though some of these pupil teachers were found to be diffident about the work in the beginning, with experience they have found that the work is interesting and they are becoming enthusiastic over it. Again pupil teachers who have first year training experience and also that of teaching in schools, find that the work under this scheme is bound to be interesting to children and pleasant to teachers.

Work in Basic Schools: Basic education has been introduced in standards I and II of the existing primary schools this year, and will be extended to other standards as years pass. The number of schools, the number of children under instruction, the number of teachers is:

Area	Number of Schools	Number of children in stds I and II	Number of teachers working in Basic Schools
Karnatak	18	707	29
Maharashtra	22	738	35
Gujarat	15	497	22

These schools include all types of schools—full first grade, second grade, one-teacher, girls, Urdu etc. With the introduction of basic education some additional teachers have been required as *it is* thought desirable to place only 30 children on an average in charge of one teacher. Thus for this year about 40 additional teachers have been engaged for basic classes.

No fixed day to day time-tables are expected to be kept in these schools except that time to be devoted to subjects and craft is shown. Teachers are given full freedom to adjust their subjects according to the situation. Much of the coordi-

nated teaching is done that way. Some of the time is devoted to outdoor work in agriculture, nature study, science, excursions to different localities in the village, sanitation work etc. Provision is made for teaching all subjects of general liberal education that so far existed in ordinary primary schools.

Progress of Craft-work: Two hours are devoted to craft every day. Children spin on takli at present. They began with very rough and crude type of yarn but now children have on an average come to spin yarn of 10-12 count, 60% evenness and 60% strength. Quite a large number of children spin yarn of 16 count and the general progress is quite satisfactory. Children have taken very kindly to the work and are very enthusiastic. It was feared that children would get tired of the monotony of work but experience has shown otherwise. Teachers complain of their difficulty in stopping children from doing the craft-work. Children enjoy this work and vie with one another in getting a larger quantity and better quality of yarn. Not only that but children want slivers and taklis to take home in order that they may spin during their leisure hours. The problem of home work as a task no longer exists at least so far as craft work is concerned. The quantity and quality of yarn collected from different compact areas during the three months the schools have begun working in craft are:

Compact area	No. of schools including Urdu Schools	No. of children	Quantity of yarn Mds. Srs.	Average count of yarn
Karnatak	18	707	3-13	10.5
Maharashtra	22	738	5-4½	9
Gujarat	15	497	4-0	11

The difficulty of supplying the right type of equipment is, however, keenly felt at least this year. The equipment is supplied by the local authorities through their District School Board Administrative Officers. Decision to introduce basic education having been taken late i.e. about April 1939, the cotton season was over and thus the cotton supplied is not quite up to the mark. Especially in East Khandesh, where the cotton season is generally over by February, the quality of cotton (raw and ginned) supplied to schools is very inferior, and the work though satisfactory on the whole is not

quite up to the mark. The wastage in making slivers is very heavy. It was also found difficult to get the necessary equipment in time owing to the ignorance of administrative officers of suitable and reliable agencies from where the articles could be had. Now that some experience has been gained, proper arrangements regarding the supply of cotton and equipment for the next year are expected to be satisfactorily made.

Deficiency of accommodation presents another handicap to the progress of work. Primary school buildings in this province have a very limited space. Often these buildings are private rented buildings or public places like the temples, chavdis or dharmashalas. Carding and spinning requires more space. There is also the need of a safe store-room in each school especially when it is held in a public place. Basic schools require special buildings and the question is now before Government.

In spite of the handicaps mentioned above I am glad to observe that the wastage is not very heavy except in a few schools. During the three months, the wastage reported from schools was as under:

Area	Average July	Percentage August	wastage for September
Dharwar	25 to 30	12.2	10.5
Khandala (Satara)	12.1	4.2	4.1
Parola (E. K.)	15.4	11.0	9.0
Valod (Surat)	9.9	4.6	4.2

This wastage is likely to be further eliminated by the supply of good slivers prepared by children themselves. At present slivers used in schools are mostly those that were stocked by the Boards i.e. they were prepared by some Khadi centres on mass basis and as they were not properly kept, the difficulty of spinning was manifest. Owing to rains cotton could not be carded, but now with the carding being introduced and slivers prepared by children, the wastage will greatly diminish. It may be pointed out that the wastage allowed by the Hindustani Talimi Sangh is 10% in the first three months on an average. Comparatively our figures are encouraging.

Progress in other Subjects: All the subjects such as mother-tongue, arithmetic, social studies including history, geography and civics, agriculture, science, physical education

etc. are taught in these schools. Language is taught in connection with the craft and other extra curricular and social activities of the school. As children are made to describe the progress they have learnt so well, and as they are taken out on excursions and made to see things for themselves, they do express themselves better and in greater detail. The reading material is at present supplied by the teachers and to give children practice in reading, extra books (story books and books of adventure as are available) are given for reading. Arithmetic is taught in connection with the craft and the work is satisfactory and adequate. Geography, agriculture etc. are taught by direct observation and experiment and by taking children out on excursions. A small plot of land is also made available for children where they grow some crops and flower plants. They keep records of the growth of plants etc. Thus the knowledge that they receive is firsthand. Drawing is also taught side by side. Children are taken on a visit to certain families of different communities, public places etc. Some sanitation work is also undertaken with their help.

In order to form healthy habits of cleanliness, orderliness, etc. children are made to wash their hands and face and clean their teeth and hair in the school. They are taught to form a queue while going out of or in to the class-rooms; they are asked to distribute articles for craft in an orderly way and so on. They are asked to keep their class-room and school clean and in this way all attempts are made to form in them healthy habits. One great handicap is felt in this work and that is the absence of sanitary arrangements in schools. There is hardly any school in the compact area which has urinals or latrines. These are urgently needed as it is in school that those habits should be formed when children are young. The matter is under correspondence with the Local Authorities and it is expected that during the course of the year suitable arrangements will be made available.

Contact with Village Life: Children are taken out on visits to the homes of people of different social status in life. In addition to these visits occasional evening programmes are arranged for the entertainment of people where children demonstrate their craft, give recitals, sing songs and bhajans etc. All these activities have only recently begun and it is expect-

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ed that they will have a very healthy effect on the education of children.

I have given you a short account of what is being done in this province. The progress is slow since the ideal before us is to make basic education compulsory and universal in the province. But when changes of vast importance are to be made they cannot be made over night. There are many difficulties in the way to be overcome. The first great difficulty is that of suitable teachers. We have opened new training centres and our object is also gradually to convert our present training centres into centres to train teachers for basic schools. But the main difficulty is that a vast number of teachers who are employed today and who cannot be removed are not qualified to undergo training for basic schools. You must remember that the minimum qualification for admission to Basic Training Centres is matriculation. In Jamia Millia where they have opened a training centre, only graduates are admitted. This shows that the standard of general education required as preliminary to the training, is very high. Our present primary teachers, some of whom have not even passed the Vernacular Final Examination are not, therefore, qualified to get the necessary training. The importance of a teacher in this scheme cannot be minimized. Even if we have trained graduates to take up the work, unless they are filled with a passion for the basic system of national education, the scheme may not be a success. In this connection, I would like you to read the Harijan of 21st October 1939, wherein Shri Rajagopalachari has in a nutshell explained the difficulty.

"I must qualify as an ideal teacher myself before I start training teachers. Teaching is also a very important craft, and just as we educate through the craft of spinning, I should like to educate through the craft of teaching also. A normal school would come into being by and by. What I am keen on is being a teacher myself. It is a pity that Bapu, having given this revolutionary idea to the world, could not put it into effect himself. He should have been free to establish a school himself and give his system a full trial. He would then have been able to perfect the system. But today a number of half-baked people have taken up the thing. They are simply carrying out the letter of his teaching with the result that they copy

his mistakes also. The idea is so original that its practice is obviously beset with difficulties, and every one who has a passion for teaching must make the idea his own and give it a trial after his own fashion and his own mind's bent. That is why I am looking forward to such an opportunity."

Teaching is a difficult art or craft. It becomes more difficult when you have to employ a complicated method—a method where you have to correlate different subjects to a craft. This method is also in an experimental stage. We want more than one craft to be taught i.e. there should be different crafts for different schools according to local conditions. This means that teachers will have to be trained to correlate subjects not to one craft but to different crafts. How this is possible it is difficult for me to say. I would like the Conference to consider this.

The next difficulty is the difficulty of housing basic schools. More space is required for basic schools than for ordinary schools. Most of the present school buildings are unsuitable. Unless, therefore, a programme of constructing suitable buildings is taken up we shall not be able to make a success of this new scheme. This matter, however, has been considered by the Sub-Committee appointed by the Central Advisory Board of Education. Their recommendation, if I may give out the information, is to ask Governments to raise loans for this capital expenditure. These schools are, however, schools under the control of Local Authorities. It will be for them to take up the question.

The most formidable difficulty which requires solution, however, is that of finance. The initial expenditure of these schools is more than the initial expenditure of an ordinary school. This is but natural. Secondly, for basic schools we shall require a larger number of teachers than for ordinary schools. The abolition of one-teacher schools is an improvement long overdue. We have not been able to do it so far because of financial difficulties. As against this we shall get some return from the labour of the school children. With sixty schools only, the problem has arisen as to what should be done with the yarn produced by the children. How should it be disposed of? This is a matter which must find an early solution. It cannot be left to chance.

These are some of the difficulties which I bring to your notice with a hope that you will throw the searchlight of your experience and find a way out of them. Great ideals cannot be achieved in a day. They would cease to be great if they were so easily attained. We have an ideal system of education before us. We have to make all efforts to attain the ideal. But we must see that in taking short cuts to reach our goal we do not miss the ideal before us and go on a wrong track. Even if slow let us be sure. The goal we are out to reach is now defined, the path leading to it is still untrodden. We have to make the path as we go. It should be the simplest and easiest. Our objective is to have a system of education which will produce citizens who will not be drags and parasites but useful members of society.

I again welcome you all. We are fortunate in having secured Acharya J. B. Kripalani to open this Conference who by his learning and insight into the philosophy underlying the basic scheme is well qualified to expound it to us. Basic education according to Mahatma Gandhi is the application of the principle of non-violence in the sphere of education and no one is better qualified to explain this to us than Acharya Kripalani. Dr. Saiyidain who will preside over the deliberations of the Conference has made a great study of the new scheme and we are indeed fortunate in having secured his presence. I am also very glad to note the presence of Mr. John Sargent, Education Commissioner to the Government of India, and numerous delegates from the other provinces, all of whom I heartily welcome.

Sjt. E. W. Aryanayakam next welcomed the delegates and visitors on behalf of the Hindustani Talimi Sangh. After outlining briefly the history of the Conference and the Exhibition he said:

When the idea of a Conference of Basic Education was first proposed, the Bombay Government kindly volunteered to act as the hosts and undertook the responsibility of all the necessary arrangements. The Hon. Mr. Kher has taken the keenest interest in the advance of basic education since its first inception. Under his direction, the experiment is being carried out with great enthusiasm in four training centres and four compact areas in this Presidency. It is only fitting that

the first Conference of Basic Education should be held in this province under his hospitality. It is also a happy coincidence that Poona should be the venue of our first Conference, as for years the basic craft of Poona has been education. We are meeting today in the very citadel of orthodox education, which has its own challenge.

On behalf of the Hindustani Talimi Sangh I welcome all the delegates who have come from various parts of this country. I also welcome all the visitors who have responded to our invitation. It is, as you know, the first Conference of Basic Education. We live in an age of Conferences, but I hold that this Conference is unique of its kind, for it illustrates powerfully how rapidly and effectively an idea can be translated into life provided it is possessed of creative vitality.

We have a strenuous three days' programme before us, but we hope that with your co-operation we shall be able to complete our programme and achieve our purpose in solving our doubts and planning out a future programme of action.

INAUGURAL ADDRESS BY ACHARYA J. B. KRIPALINI

Honourable Mr. Prime Minister, Chairman of the Conference, and friends!

I thank you for the honour you have done me by inviting me to open this conference. When I accepted the invitation, I little realized that I shall have to face such a learned and distinguished audience, specially of the teachers. When a person becomes perfect in any art or profession, he becomes a teacher of that art or profession. The art of the teacher is therefore at the apex of all arts; and for me to assume the role of a teacher of teachers would be rather presumptuous. But then the greatest task of basic education or for the matter of that any new system of education, is to educate the educators. If therefore in what I say I appear to play this exalted role it must be understood that I do it not in my name but in the name of him who has placed this new system of education before the nation. What I say will be but the echo of the ideas that the great man of genius has placed before us. At best I can act only as an humble interpreter.

Whenever institutions become complex, over-civilized, whenever seeds of corruption enter into them, in short when there is decadence, what happens is that the first and the primal impulse and reason that gave them birth, are exhausted. At such times first things cease to be first and secondary objects engross attention and monopolize interest. Our systems of education not here alone but all over the world have suffered from like decadence. In the dawn of history all knowledge proceeded from the concrete, the discreet and the real, from what could be seen and sensed. Man as he arrived to his humanity had the external world, had all nature around him. The animal too had that nature before him. But man unlike the animal began to work upon it and give it new and fanciful shapes. He began to master it for his ever increasing needs. This was the process by which things were done and knowledge acquired. But, as I said, when institutions decay the primary and natural order is lost sight of. The reformer, in every field of activity, in every walk of life, has therefore to call people back to nature, back to the original and primal meaning of things. Take a very simple example of human dress, with which men and especially women decorate themselves today, in what is called civilized society. How did dress first originate? It originated owing to the exigencies of weather, for the protection of the human body. Today among the rich it serves the purpose of decoration, ostentation and fashion. The primal purpose has receded to the background. In food too we find a similar change. I am sure that if we were deprived of our clothes and food, we would hanker after the coarsest clothes in order to protect our bodies from the vagaries of weather, and the plainest food for the satisfaction of our hunger. The reformer in dress and food would therefore call us back to nature, to the original and primal meaning of things.

In Hindu philosophy, it is said that the world is made of *rupa* and *nama*, form and name. Form must come first and name afterwards. Until and unless there are material objects, actions and relations there can be no names to designate them. Names and words do not precede, but follow, things. But in our educational system, we have inverted this natural order and put names and terms first and objects afterwards. We

are taught through words and phrases and general ideas. We have allowed children but a passing acquaintance with things, with concrete nature and its processes. We are not prepared to make them wait upon nature patiently but are in a hurry to teach, by means of words. If we were not in haste we would see that all human knowledge in whatever field and howsoever abstract has its bases in the concrete, in observation and experiment. The highest flights of our fancy have their feet fixed in the soil. By the new system of education we are called back to mother earth, back to the primal process of acquiring knowledge, which humanity has successfully employed in raising itself.

When Gandhiji first announced his new reform the learned who had acquired their knowledge in the orthodox way by means of words and phrases, were up against his scheme. They could not understand how all that they had painfully acquired through words could be learnt through the instrumentality of nature and craft work. I do not blame the learned for this failure to understand Gandhiji. They have to deal here with a unique and if I may say so a queer personality. Gandhiji is so intensely in a hurry for the practical that he forgets to approach a problem through systematic theoretical study and exposition, which alone the educated, of today can understand and appreciate. He does not proceed in the manner of the learned: he tackles his problems like the man of genius that he is. He works as an artist. He writes no thesis giving elaborate arguments for the proposition he places before the nation. With his gifted imagination he sees a new scheme as in a sensuous picture. Also like the artist he does not invite his audience in his studio and give them a view of the progress of his work. With the briefest introduction he announces his reforms. We are not invited to witness the process of his thought. The logical steps by which he reaches his conclusions are not given. Therefore if the learned misunderstand Gandhiji they cannot be much blamed. They fall unconscious victims to the peculiar trick of his genius. However if Gandhiji wanted the educated to understand and properly appraise his thought he ought to have written a thesis on basic education, after consulting authorities on the subject. But the trouble is he reads few books. He cannot understand

that the modern way of approach is through words and not sensuous images. Incapacity to grasp images is the price the intellectuals have to pay for the fruit of the tree of knowledge.

A reformer brought up in the intellectual atmosphere of modern Europe and America, if he had for instance to advocate a new system of education, would give us a brief history of education, tracing the beginnings of knowledge, as it arises in primitive societies. He would have described the development of all forms of knowledge scientific, philosophic, political, social, ethical and spiritual. He would then have traced how after a particular evolution knowledge becomes rigid, deductive and scholastic; how it is lost in the maze of words and phrases, owing to various influences specially of the priests and the philosophers; then, he would have shown how reformers like Roussaeu, Pestalozzi, Herbart, Froebel, John Dewey and others called men and women back to nature and advocated and introduced reforms in the educational system; how and to what extent their movements succeeded and to what extent they failed in their purpose and why they failed; why it was not possible to weave education round a productive craft, and how centralized mass production in factories under depressing conditions of wage slavery in the capitalist regime, made this impossible. He would have also said something about the polytechnization of education in Soviet Russia. He would have ended by showing how Indian conditions favour the new experiment. He would have shown how the reform advocated was called for by the march of history; how it was inevitable and in consonance with approved scientific theories in education. One must never forget the attachment of the educated to their theories. A philosopher when reminded that his theory was not borne out by facts replied that the facts must be wrong. We must know how to approach such minds. It is because of this difficulty of approach to the intellectuals that the reformer has often insisted upon child-like freshness among those who would understand and appreciate new ideas.

Another handicap of the learned is that they suffer from what may be called the fallacy of words. For them certain words have a settled unalterable connotation. If a particular word is used there is no need to look to the referent beyond.

For instance if a person is called a capitalist or a bourgeois, a learned socialist will need no further information before dubbing him as a heartless and cruel exploiter. In the same way those who are wedded to the old order, if they hear that a person is a communist, would straightway think of him as a red revolutionary waiting in ambush to destroy the social order. Before Congressmen achieved a measure of success, they were considered faddists and fanatics. Sometimes we were considered as disturbers of peace and a public nuisance. We had in our ranks all sorts of people but we were all lumped together under one generic title, not complimentary to ourselves. When words and not facts come to be the source of knowledge, there is likely to be intellectual confusion.

This tyranny of words affected our critics, when they heard that the new system was the brain-wave of Gandhiji and had emanated from Wardha. No good could ever come from that quarter. Then, what were Gandhiji's credentials for invading the field of education? He had never been to a university, foreign or Indian! What did he know about education? All this looked quite conclusive. No effort was therefore made to understand and appreciate the scheme and what it stood for. If, instead of concentrating attention on Gandhiji's personality and his credentials, an effort had been made to understand the scheme itself, there would have been a better appreciation of the new idea and even if there had been criticism, it woud have been better informed and therefore, constructive and fruitful. For instance some of the Vice chancellors of our universities thought that Gandhiji was advocating the imparting of all higher university education through craft work. The whole thing was absurd. What Gandhiji wanted to weave round a craft was the minimum necessary education, which must be made universal and did not exceed the matriculation standard.

Again the question of the value of craft work was an idea too novel for the learned. How could education be made to pay? If it was made to do so, it must result in exploitation of child labour. Now production and value are not questions of theory but of facts and figures carefully examined. If the value question is to be disputed it is best to study the figures given by the advocates and find out wherein they err.

After all it is not difficult to know the rate of wages and the amount of work that can be turned out by the pupil within a given time limit. But instead of proceeding factually and scientifically the whole question was dismissed as the old man's fad.

If the learned instead of pronouncing judgment a' *priori* had studied the scheme they would have found it natural, scientific and psychological. All knowledge proceeds from observation and experiment; it proceeds from the concrete to the abstract, from the practical to the theoretical. First we have observation and experiment and then the general law based upon induction. After induction is complete we proceed to deduction, which again is to be verified by actual experience. All knowledge thus proceeds from the practical and its aim too is practical. It must be justified by human experience.

When Gandhiji was thinking of his new scheme he was thinking of this scientific process. He was also thinking in terms of child psychology. The child finds it natural and easy to proceed from the actual and the concrete to the abstract. His tendency to action and disinclination to abstract thought make it easy for him to handle and work upon concrete nature and thus acquire knowledge. The present system of education runs counter to child psychology. Knowledge is put through the ears to be vomitted out through the mouth. I remember the many things which I was made to repeat and which I knew, but which I never understood until years afterwards, when I had been in contact with actual things and life. If instead from the beginning I had been taken to things, and better still, had been allowed to handle and fashion things, I am sure I would have learnt quicker and better.

I therefore maintain that the new method proposed by Gandhiji is scientific. But how can Gandhiji, the idealist and the mystic, be a scientist ! How can one believing in God and the efficacy of prayers be a scientist! This is something foreign to the educated mind. Yet some of the greatest scientists have been ardent believers in God. A scientist need not necessarily be a materialist. The essence of science is the investigation of truth by the experimental method.

Gandhiji claims no acquaintance with revealed knowledge. All that he knows he claims to have learnt through experience and experiment. He has called his autobiography 'Experiments with Truth.' Gandhiji also has the scientist's absolute regard for truth. If he finds that his theories do not work, he varies and even abandons them. But you ask, what about his inner voice? Every great scientist as every inventive genius has his inner voice. It is his intuition or inspiration through which he works. It is this intuition that makes him see significance in facts that are insignificant to the ordinary. Since perhaps the beginning of creation people have seen apples falling, but it was the intuition or the inner voice, or call it what you will, of Newton, that made him see a universal law in this ordinary every-day occurrence. If we were not caught in the maze of words we would not find it difficult to understand and appreciate these things.

So much about method. If the method is natural and scientific it can suit any system of education whatever its aim. In the history of modern education in Europe and America the labour or craft method has been advocated apart from any general aim that the state or the educator had in view. It has been advocated for an individualist and capitalist society as well as for a socialist or communist society. It has been advocated even by religious organizations. In a sense the method stands apart from any other general aim of education. We have been asked by Honourable the Prime Minister to judge the new method on its merits and we shall find that it is educationally sound. Even so we may not forget that Gandhiji lighted upon this method in connection with the rest of his philosophy of life for the individual and society. It would not therefore be out of place to review, however briefly, the philosophy of life Gandhiji advocates. It is the more necessary, because if our education has suffered grievously from a defective and unscientific method, it has suffered much more from defective and unworthy ideals. I am not caricaturing the aims of the present system when I say it was designed to produce cheap coloured administrative and clerical assistants for the white Government. If there was a worthier aim it was, in the words of Macaulay, to produce a race of Anglo-Saxons in thought and culture who were Indians only 'in the

colour of their skin and the blood running through their veins.' The latter, under certain conceivable circumstances, may even be a worthy objective, if it could be achieved. The Anglo-Saxon in his own home has many loveable and laudable qualities and if Indians could be turned into coloured Anglo-Saxons there may be some point in the effort. But the object is not possible of accomplishment as a century of Anglo-Saxon education has demonstrated. The educated Indian has become Anglo-Saxon only in certain not very desirable externals. He has left behind him some of the good qualities of his ancestors and adopted instead some doubtful ways of his masters. There may be honourable exceptions but they are few and far between. However, it was unthinkable that the masses of India could ever be anglicized even in this vulgar sense of the term. The only result has been that the educated Indian has been effectively cut off from the mass of his countrymen, and the little knowledge he has painfully acquired through the medium of a foreign tongue is confined to himself and never filters down to them. An unbridgeable gulf has been created between him and them. This gulf would have gone on widening but for the national movement which has tried to bring the classes and masses together by giving them a common goal to strive for. So if it is necessary to change the method in education it is perhaps more necessary to provide it with worthy and noble ideals.

To understand the philosophy of a reformer like Gandhiji it is necessary to view it against the historical background. Only so can one fully evaluate and appreciate the changes he proposes to bring about in the present order of things.

You have heard of the scientific socialist, and Marxian interpretation of history. It is economic. We are told that society changes with the instruments of human production; at least that is the deciding factor in all social, political and cultural upheaval, change and progress. The march of history is a war to the knife of economic classes. We may or may not agree with this interpretation of history and all it implies but we must admit it has powerfully affected the lives and fortunes, the hopes and anxieties of millions of people today. It is likely to influence millions more in the future.

The Marxian method of investigation, we are told is

scientific. Science has nothing to do with final aims and values. It explains and describes the process of change. But we are told that the historical struggle has an unconscious aim which must be made conscious now; it is to produce a classless society. Production of a classless society is scarcely an aim; it is merely a culminating point of a process. When therefore pressed further the Marxist is obliged to say that a classless society would be free from all human exploitation and would establish equality and justice between man and man. So after all the Marxist, in spite of his belittling moral and spiritual aims, has to posit such ends to justify all the pain and travail of history and the almost martyr-like sacrifices he makes to establish a classless society. What the Marxist seems to yield grudgingly, Gandhiji puts at the forefront of his philosophy.

The aim of history is to change the natural man into the moral or spiritual man and make him into a member of a moral or spiritual society. From an individual he has got to be a social individual, that is, an individual in society. This implies that there must be some harmonious co-relation between the life of the individual and society.

What is a moral individual? Various definitions may be given from various view-points. But few will quarrel with me when I say that a moral or a spiritual person is a free person. He is free not in the sense that he might do any and every thing he pleases. That would be the freedom of the blind beast. Human freedom cannot be thought of apart from human responsibility. Moral man combines free choice with due restraint, and liberty with responsibility. To attain this end he must be a member of an appropriate moral society. The march of history has been eternally trying to bring about this integrated result.

Humanity began with strife, violence, and war combined with natural cunning. Primitive life was the life of the jungle, red in tooth and claw. It was a war of each against all. Life was precarious and uncertain. Humanity somehow moved out of this chaotic condition, which, had it continued long enough, would have destroyed the species. It organized itself into families, clans and tribes: later into castes, classes, countries and nations. Some kind of social arrangement with

some sort of order, equity and justice were introduced. War and violence were pushed back a little. Yet these primitive societies were created through war and violence. Powerful individuals and classes imposed their will and law upon those whom they had subdued and conquered. Every social group was therefore divided between masters and slaves, rulers and ruled, kings and subjects, patricians and plebians, barons and bondmen. If the group was internally divided, externally it was at war with every other group. Yet even this unjust and violent order that repudiated the idea of oneness and equality was an advance on the previous order. Some kind of justice and equality was established even though it was among the slaves and the subjects. There was no justice or equality as between master and slave, and ruler and ruled. Yet the law, that might alone is right, was partially modified. In such societies the King and the Lord were divine with some justification, because they had helped to establish some sort of order and justice and equality in a section of humanity. This was a moral gain. For we must remember that any kind of order that makes some kind of civilized life possible is better than no order, better than chaos, unless disorder and chaos are temporary or the necessary price to be paid for a better and higher order.

However this society that was neither just, nor equal nor integral could not satisfy the urge for fraternity, equality and justice, in individuals of exceptional moral and spiritual sensitiveness. They felt within themselves the call for a higher order of goodness, mercy, charity and love. How were they to fulfil their aspirations, to identify themselves with all human life? A society that was divided between masters and slaves could not satisfy this inner need. When therefore the urge came on them they renounced life and stood aside from the maddening crowd and ploughed their lonely furrow to realize their ideal. They became introverts and left the world with all its concerns. Thus it was that Buddha renounced the world. Thus it was that Christ, despairing of establishing God's kingdom on earth, was constrained to declare that His kingdom was not of this world but of the other world. He wanted His disciples to 'render unto Caesar the things that belong to Caesar and to God the things that belong to God.'

The kingdoms of the two were different. When these reformers preached their faith they preached it to individuals for their individual emancipation and salvation. Buddha, when he attained the light, said that he would like to be born again and again till there was even one soul left who had not attained salvation. He could think of humanity only as a collection of separate individuals. He had no ambition to change the face of things here and now.

The example and the precept of the masters did affect social relations, but to a very slight degree, and that indirectly. For the rest there was cleavage between the religious, the material, and the social life. The best spirits had to renounce the world and its concerns as so much *maya* or the weariness of the flesh. Buddha preached his non-violence to kings and princes but for their individual life and salvation. The Christian church exempted political leaders and organizers from the full obligation of the law of universal love and charity preached by the master. The most non-violent sect of the Jains freed kings and princes from the full implications of the doctrine of Ahimsa; but to none of these kings and rulers was individual salvation denied. Thus society that was divided between masters and slaves came to be further divided between those who followed the way of the world and those who renounced the world and followed the way of the Lord. Only thus could the latter attain to the freedom, equality and love whose possibility was denied in external organized society and its relations. Though they failed to mould social, political and economic relations after their hearts they proved beyond all doubt the moral worth of the individual and his freedom from external cramping circumstances. They stood as high peaks on the plain dead level of life. This too was a great gain for humanity.

The great renouncers organized societies after their heart's desire, societies free from exploitation, free from the relation of the master and the slave, the high and the low. He who was high among them was the servant of all and held his position without pride and in humility as a sacred trust and an opportunity. The first communist and socialist societies were those of the religious fraternities based upon non-violence, love and free choice. There was no coercion, and

authority worked by moral persuasion and sanction. The individual under such moral authority was neither cramped nor humiliated. He was but obeying that which he had freely chosen as his better and higher self, which for the time being resided in the master or the *guru*. Such religious groups and fraternities were oases in a society that was the scene of inequality, injustice, lust and pride of power, war and violence. Yet these were the examples of an integrated society, free from exploitation, violence and war. Here the free moral individual could live his life in a kind of free and moral society.

The tyranny and injustice in organized society however went on apace, till the average man roused himself from his age-long slumbers and asserted himself against his masters. This struggle established what is known as democracy. Democracy asserts the moral worth of the individual in society. It stresses his equality. He as an individual counts politically and organizationally as one unit. It recognizes the moral and spiritual dignity of man as man. It also puts an end, at least in theory, to the political exploitation of the individual. Democracy ends violence inside a group. Matters are decided not by cutting heads but by counting them. Each head stands for one. Democracy also provides for alternate rule and obedience. It makes for liberty informed with responsibility. Thus democracy is a moral and spiritual principle on the material and political plane. May it not be therefore that even the wage slaves of democratic countries who have only their chains to loose, refuse to accept the totalitarian communist order as a solvent of their difficulties? They have with pain and travail attained to political equality which guarantees them their dignity as individuals. This they are unwilling to barter away for economic comfort and equality. They are loath to risk their new-found freedom by a revolution whose fruits and rewards are uncertain.

If the new-found democratic principle in the politics of the nations had been allowed free scope to develop itself, it might have saved nations from internal conflicts and helped to establish in course of time an integrated and unified social order. It might have progressively moralized society. In such a society, it may not have been necessary to seek the

forest or the walls of a monastery for one's highest fulfilment as an individual. But society's progress is never in a straight line. The path is zigzag. There is advance and regress. Even as humanity discovered democracy, it came by the inventions of steam, electricity and other forces of nature. These, with the discovery of new lands, ushered in the industrial revolution and with it the capitalist order and the modern empire. It will be a long story to recount the changes brought in by these new forces. They are not complete even today. Whatever good the industrial revolution did there is no doubt that it very nearly destroyed the gains of democracy. It produced the old divisions and inequalities on a different plane—the economic plane. It divided society into haves and have-nots, masters of machine and the wage-slaves, the Bourgeoisie and the Proletariat. In such a society the democratic vote that asserted the dignity of man became a sham and a mockery. The starving wage slave who was crushed by the capitalist machine could not turn his vote into bread and butter. If he did, he would only be repudiating his new-found liberty as an individual. We had therefore the old contradictions again, but now removed from the political to the economic field. As political power formerly ensured economic competence now economic power ensured political power. We had again the same spectacle of moral man in immoral society.

Some other principle besides democracy was to be introduced if humanity was to be saved. The new need was economic. Therefore the principle of economic equality was discovered and we had the cult of socialism. Socialism proclaims the equality of man in the economic field. As such it is a moral and a spiritual principle. But in asserting it, its advocates pronounced it as merely a material principle and possible only in a society where all moral and spiritual values have been abolished. They pitched the new principle against that of democracy. Modern socialism, born in the age of science and mechanized and centralized big industry, could not divest itself of its swaddling clothes. Its advocates confused capitalism with democracy forgetting all the while that capitalism had done the greatest injury to the democratic principle by abolishing the free and responsible individual.

The new principle was asserted at the expense of the old gain of humanity.

Also, capitalism with all its attendent evils was confused with the principle of the freedom of the individual. Therefore the remedy discovered was not only to abolish the ill-regulated and chaotic individualism but individuality itself. For the Marxist the individual is but the ensemble of social relations. The remedy proposed is worse than the disease. It abolishes the patient along with the malady. Of course, it was not easy to justify theoretically this abolition of the individual. We were therefore promised a resurrection of the individual, after the advent of the Marxian revolution. Those who had ceased to believe in spiritual resurrection assured us of the same on the material plane.

We see the new principle of Socialism at work in Russia. It has established some sort of equality in the economic sphere. But economic equality has been heavily paid for, by the curtailment of individual initiative and liberty. Naturally, because for the new creed the individual apart from society does not exist. In this as in many other things communism and fascism are as one with each other. The latter thinks of the individual as a cell in the national or racial body politic; the former thinks of him as a cell of a collective world proletariat. Till the world proletariat gets united and comes to its own the individual in Russia is as much a cell in the body politic of Russia as the individual in Germany or Italy. The individual, both in the fascist and communist countries, is free even as a cell in the human body is free to work out the will of the superior organization. He can have no life or will of his own.

The bolshevic equality in the economic field is built upon big centralized mechanized industry and agriculture. This centralization naturally affects the political field also. The result is bureaucratic rule. The holders of power may not have any undue economic advantages, that is so in Italy and Germany too, but then office gives them advantages which have their economic value. Apart from this there is nothing to check the pride of power. There is no moral principle enjoining humility on those who happen to hold important positions. (Humility is only a bourgeois virtue.) External

checks are no doubt important but they cannot go far enough, to the root of things in the egoistic self-regard of man. Certain positions in the body politic would always be more important than others. From a moral view point all work howsoever humble is necessary and therefore exalted. If we take away the moral view-point, there is nothing to prevent the pride and therefore the tyranny of power and position. Life under earlier monarchies, aristocracies, and dictatorships within certain narrow limits, left spheres of autonomous action untouched by authority. Such spheres of autonomy are effectively annihilated under communism as we know it. So the position in this respect is much worse than under democracies.

The much-talked-of local-self-government in Russia exists more in theory than in practice. When all industry, commerce and agriculture, when the whole life of society is organized on a material scale, the local units can have but little voice in the shaping of the new order; local units would naturally lack the necessary information and skill. All this was more than plain in the process of the liquidation of the Kulaks. The proof of political liberty is in the treatment meted out to the authors of the revolution under the Stalin regime.

This in the field of internal politics. In international politics Russian diplomacy has proved itself as torturous as the diplomacy of capitalist or fascist countries. The principle of open diplomacy, as every other principle which we were assured would usher in the millenium, has gone by the board. Yet all these things stand justified for the faithful! The result is nothing to be wondered at when one remembers that moral considerations have no relevance in the solution of the problems communism has placed before itself.

In ancient times the most absolute of rulers and the proudest aristocracies had certain limits placed upon their tyranny and rapacity. These restraints were supplied by the morality of the times embodied in custom, religion, superstition, and even primitive taboos. Without these moral restraints, the slight order that was established by the strong would have disintegrated owing to the excesses committed by the holders of power. Power in primitive times was

harnessed with responsibility however slight. In the same way the wealth of precapitalist times was burdened with various responsibilities.

Modern democracy came in simultaneously with the advance of scientific research. The latter pushed aside moral and spiritual considerations. Democracy under such circumstances became a mere organizational political device. The freedom of the individual divested of moral responsibility introduced a chaotic element. The confusion thus created was worse confounded with the advent of the Industrial Revolution. The only nexus binding free men was the nexus of legal contract. If this legal contract sent the weakest to the wall it was merely the triumph of a scientific principle—survival of the fittest. If people had only their self-interest at heart the resultant self-interest would, by some kind of alchemy, turn into altruism. Instead of man being the full warm-blooded individual that he is, he became an economic man. Marxism turned him into an ensemble of social relations.

Only recently, when the principle of democracy is in danger, its advocates have dimly begun to realize that it is not merely a political device but a great moral and spiritual principle. It is now felt that the abandonment of this principle would spell regress for humanity. While the democratic principle is being rehabilitated to its proper place, socialism and communism yet remain material and economic principles regulating class conflicts and class wars. Nay, we are told they cannot be fruitful unless the material philosophy and all its implications are accepted. It is forgotten that even as the democratic so the socialist principle is a moral principle. Both are meant to assert the divine dignity of man on the material plane. That principles of human fraternity and dignity may not remain mere forms without content, they must be established in the social, political and the economic fields.

It is this that Gandhiji proposes to do by his philosophy of life. He believes in the spiritual origin and destiny of man. This destiny has got to be worked out by the average man and woman in a moral society. The individual and the social, the inner and the external life must therefore be informed

and guided by principles of non-violence, truth and justice. That this may be so, it is necessary that in social, political and economic relations the means must be as pure as the ends. If it does not benefit a man to loose his soul to gain the whole world, it does not likewise benefit a nation to gain the whole world and lose its soul. Moral society must have its appropriate external, social, political and economic institutions. In the arrangements of these, Gandhiji's effort is to retain for humanity the moral and material gains of democracy and socialism. Socialism of the Marxian type, by its over-centralization and the divorce of moral principles from its means and ends, crushes the individual however effectively it may supply him with material goods. Physically starving humanity may not care for moral ends and may for some time be satisfied with two square meals a day. But neither individuals nor society can live for long by bread alone. They must have other and higher aims without being deprived of the physical means of wellbeing. A necessary condition of life cannot however be its end.

Gandhiji's advocacy of cottage and village industry along with decentralized agriculture and commerce is to cure the excess of centralization of the communist order. For him, therefore, the principle of decentralisation is a moral principle. It makes for free choice in a variety of fields. It also makes possible the exercise of the will of the individual over an extended area. It creates external possibilities for the formation and expression of free opinion. Gandhiji refuses to be tricked by the rosy socialistic picture of plenty of material goods equally divided. Such plenty would not compensate for the moral loss involved in the loss of individuality. Gandhiji's is too practical to deny absolutely the need of some centralized industry for the requirements of modern civilization. Yet he is too moral and humanitarian to allow the machine to swallow up the free individual. Wherever it is necessary to have centralized production it must be in the hands and under the control of the community.

Political life, internal and international, must be guided by truth and non-violence. There must be no secret diplomacy and armaments. Holders of political power must be the servants of their people. Their economic life must be

in keeping with the average standards prevalent in the nation. No profession must be considered high or low provided it serves the social end for which it is intended. Every worker however humble is not only worthy of his wage but also of honour.

Thus it is that Gandhiji proposes to spiritualise politics and economics and appropriate for humanity the great moral principles of justice and equality underlying political democracy and economic socialism. All his practical programmes are directed towards the concrete aim of providing moral man with a moral society. His philosophy of life, for the individual and for society, gathers up in one sweeping whole the moral, material and organisational gains of democracy and economic socialism. It thus sums up the different trends of modern human history. It works for a new non-violent revolution and ushers in a fresh epoch in history.

It is to educate the individual and society in the light of the principles of this new revolution that he has suggested his new scheme of education. He has given us both a natural and scientific method in education and provided it with worthy and noble aims for the individual and for society. It is in this light that his scheme of education must be judged.

CONFERENCE AT WORK

PRESIDENTIAL ADDRESS

Presidential Address to The Basic National Education Conference, Poona, 1939, by K. G. Sayidain, Director of Education, Kashmir 30-10-1939.

I am duly thankful for the great, but somewhat undeserved, honour that has been done to me in inviting me to preside over the deliberations of this important conference. I have no claim to this distinction beyond the insufficient fact that like numerous other educational workers, I have been interested, both theoretically and practically, in the scheme of basic national education and the opportunity has been unexpectedly vouchsafed to me of making a modest start in this direction in the states of Jammu and Kashmir. This state, from one point of view, has an advantage over the rest of India in so far as its people, particularly the Kashmerese, have a remarkable tradition and capacity for artistic craft and they have won the envy and admiration of outsiders in this connection. To them, therefore, the introduction of the craft in elementary education does not appear to be an unintelligible innovation. The response of the teachers whom we are training for our new schools has been remarkably encouraging and it has greatly strengthened my faith in the soundness of the underlying principles of the educational scheme.

I am sure you will agree with me wholeheartedly in deploring the circumstances which have made it necessary for me to preside over this conference. I refer to the unavoidable absence of Dr. Zakir Husain, the chairman of the Hindustani Talimi Sangh, who, under the inspiration of Mahatma Gandhi, has been the directing head as well as the guiding spirit of this great education movement and whom no one can suitably replace on this occasion. I am sure you will all join with me in the hope that he may soon be able to return to India and resume the leadership of the movement which rightly belongs to him.

We are meeting to-day under the shadow of a national and international situation which is unprecedented in its

acuteness. Western civilisation driven by the merciless logic of certain forces inherent in its being, is involved in a death struggle and all the powers which the advance of science has so generously placed at the service of man are being exploited for human destruction and to repress the urge for freedom in weaker nations. All the resources of human intellect and ingenuity have had to be diverted from creative and fruitful channels into the manufacture of ugly engines of death and destruction. Nazism intoxicated with its disciplined strength, the bitter fruit of its effective suppression of individuality, has asserted itself successfully against some of its weaker neighbours and the democratic powers of Europe, moved partly by a belated sense of justice and partly by the instinct of self-interest, have taken up this challenge. Europe has been plunged into a war whose consequences in terms of human misery and bloodshed imagination cannot accurately foresee. India is not only powerfully affected by the lengthening and omnious shadow of this war but, in her internal politics also, she is face to face with a crisis of the first magnitude, culminating in the recent or impending resignation of the Congress Ministries in various provinces. It is against this background surcharged with anxiety and unpredictable consequences that we are having our first conference of basic national education at the invitation of the government of Bombay. Our meeting at this historical moment is not, however, a mere accident. To my mind this fact is charged with great significance. The casual observer may wonder why when the rest of the world is heading towards one of the greatest disasters of human history, we in this conference should concern ourselves with such small and apparently trivial matters as the education of young children in primary schools. This attitude is intelligible, for, to small minds, cultural forces have always appeared trivial and negligible in comparison with the forces of destruction. But this attitude reveals a lamentable perversion of values, a failure to appreciate the truth that it is the creative and constructive forces of culture which ultimately shape human destiny and that what we regard as the great and catastrophic events of history are a result not exclusively of economic but also of psychological forces which have been set in motion in the minds of individuals and groups. If,

therefore, we concern ourselves with a better system or a new ideology of education based on justice, co-operative endeavour, productive work and respect for human individuality we do so in the belief that through such education we can direct the intellectual and emotional disposition of the growing generations into the right channels and thereby help to constitute a powerful guarantee in favour of peace, justice and humanity. And may it be said to the credit of this country that even when she was faced with the greatest crisis in the national and international field, she did not fail to show due appreciation of the creative forces which weave the texture of a nation's intellectual and spiritual life. It is now over two years that the scheme of basic education was inaugurated by Mahatma Gandhi and during this period it has undoubtedly made great progress. In some provinces it has passed beyond the preparatory stage and is being worked as part of the recognized system of education. In others, the training of teachers and the preparation of detailed schemes of work is nearly complete and the next academic year should see the opening of new basic schools. Even in provinces where Congress Ministries are not functioning the basic idea of the scheme e.g. its insistence on crafts and productive work, its view of the syllabus as an inter-related unity, have exercised considerable influence on the educational reorganization which is being attempted there. I have no doubt that the secretary of the All India National Education Board will give you a report of the present position of basic education in various provinces. Having arrived at this stage it is but proper that we should welcome this opportunity of comparing notes, to discuss our experiences and observations, and to seek clarification of issues which are still doubtful. Such a conference would be valuable under all circumstances but in the case of a new scheme like this where all the soil is virgin soil and constant vigilant experimentation is needed to ensure success the importance of free and frank discussion cannot be exaggerated. We have to benefit from what our colleagues in other part of the country have done, we have to place our own experience into the common pool. We have also to safeguard against the ever present danger of letting the scheme petrify into an orthodoxy which may not be criticised

or modified in any particular. While clear and convinced about our objectives and basic fundamentals we have to keep our minds open to suggestions and criticisms both from inside and outside, for no loyalty and no allegiance can be greater than the loyalty and allegiance that we owe to truth and the spirit of inquiry, which is its hand maiden. We must relentlessly examine the methods, syllabus, the standards as well as the actual educative and economic implications of the scheme and, where intelligent experience demands any modifications, we should be gladly prepared to make them. I hope and trust that the conference will set about its important task in this spirit of broad and open-minded inquiry.

Before I close I should like to refer to a question that is being asked all over the country at the present moment. What will happen to the scheme of basic education when the congress goes into wilderness? Partisans of the scheme ask this question with concern and anxiety, its opponents with ill-concealed triumph. I must confess that the question does not worry me unduly. The scheme was born when the congress was in wilderness; it was but a chance that, soon after, the congress assumed office and was able to extend its patronage to the movement; if the congress goes into wilderness again the scheme will have to stand on its own intrinsic merits. As a matter of fact the unexpected association of the congress with provincial administration has given to the movement a certain amount of extraneous, and even spurious, prestige which is good from the point of view of quick results but perhaps not so good from a scientific point of view. On account of this association of the scheme with the congress governments in the provinces it has unfortunately become a part of communal controversy. It is not for me in this conference to discuss the nature or the rights of the controversy. If there is any truth, however, in the allegations that have been made, it is the business of the administrators concerned to meet them. But so far as the educational criticisms are concerned, it is a matter of pleasure to observe that no important and responsible school of thought in the country has differed from the basic idea of the scheme viz., the imparting of education through some form of productive

craft work. As for the many criticisms of detail that have been made, time and experience will, I am sure, triumphantly answer the doubts that have been raised. So far as the present crisis is concerned I am sure that if as a result of political changes the scheme is deprived of government patronage—though personally I see no reason why any reasonable government should necessarily disown the scheme —those who strive for the inauguration of a better system of education in India will continue to do so, not in the sunshine of government patronage, but through their own earnest, sincere and co-operative effort, and I feel confident that they will emerge wiser, more useful and richer in experience out of this ordeal. Let us, therefore, bend our united energies to working the scheme with the intelligence and courage and do so in a spirit of humility which welcomes criticisms and the lessons of experience, and eschews the desire to offend.

or modified in any particular. While clear and convinced about our objectives and basic fundamentals we have to keep our minds open to suggestions and criticisms both from inside and outside, for no loyalty and no allegiance can be greater than the loyalty and allegiance that we owe to truth and the spirit of inquiry, which is its hand maiden. We must relentlessly examine the methods, syllabus, the standards as well as the actual educative and economic implications of the scheme and, where intelligent experience demands any modifications, we should be gladly prepared to make them. I hope and trust that the conference will set about its important task in this spirit of broad and open-minded inquiry.

Before I close I should like to refer to a question that is being asked all over the country at the present moment. What will happen to the scheme of basic education when the congress goes into wilderness? Partisans of the scheme ask this question with concern and anxiety, its opponents with ill-concealed triumph. I must confess that the question does not worry me unduly. The scheme was born when the congress was in wilderness; it was but a chance that, soon after, the congress assumed office and was able to extend its patronage to the movement; if the congress goes into wilderness again the scheme will have to stand on its own intrinsic merits. As a matter of fact the unexpected association of the congress with provincial administration has given to the movement a certain amount of extraneous, and even spurious, prestige which is good from the point of view of quick results but perhaps not so good from a scientific point of view. On account of this association of the scheme with the congress governments in the provinces it has unfortunately become a part of communal controversy. It is not for me in this conference to discuss the nature or the rights of the controversy. If there is any truth, however, in the allegations that have been made, it is the business of the administrators concerned to meet them. But so far as the educational criticisms are concerned, it is a matter of pleasure to observe that no important and responsible school of thought in the country has differed from the basic idea of the scheme viz., the imparting of education through some form of productive

craft work. As for the many criticisms of detail that have been made, time and experience will, I am sure, triumphantly answer the doubts that have been raised. So far as the present crisis is concerned I am sure that if as a result of political changes the scheme is deprived of government patronage—though personally I see no reason why any reasonable government should necessarily disown the scheme —those who strive for the inauguration of a better system of education in India will continue to do so, not in the sunshine of government patronage, but through their own earnest, sincere and co-operative effort, and I feel confident that they will emerge wiser, more useful and richer in experience out of this ordeal. Let us, therefore, bend our united energies to working the scheme with the intelligence and courage and do so in a spirit of humility which welcomes criticisms and the lessons of experience, and eschews the desire to offend.

CONFERENCE AT WORK

DISCUSSIONS

1. The training of Teachers.
2. The technique of correlated teaching.
3. The financial and administrative problems of Basic Education.
4. The Basic syllabus in practice.
5. The supervision of Basic Education.
6. Findings of the Conference.

(1) TRAINING OF TEACHERS

(First Session)

As the training of teachers forms one of the most vital questions of basic education, three sessions of the conference were devoted to the discussion of the problem in its various aspects.

The first session was on Monday the 30*th October,* 1939 *at* 8 *A.M. Prof. K. G. Saiyadain presided.*

Prof. K. G. Saiyadain: I shall now begin the business of the meeting. The topic for discussion is very important, namely, the 'Training of teachers of basic education'. The discussion will be opened by Dr. I. R. Khan, Principal, Basic Training College, Allahabad, and he will be followed by Mr. R. D. Derasari, Principal, Basic Training Centre, Katargam. After that, the subject will be thrown open to discussion, and the procedure would be that when these papers have been read, any delegates who want to make any observations on the points that have been raised, or want to bring forth any other points, should kindly send me their names so that I may be able to call them in that order. In order to see that as large a number of delegates take part in the discussion as possible, I would suggest that there should be a time limit of 10 minutes for each speaker. If there are any gentlemen here who are not delegates, but who want to speak, they are also requested to send in their names. I should like to give them also an opportunity of participating in the discussion.

Dr. I. R. Khan, Principal, Basic Training College, Allahabad, opened the discussion.

The Training of Teachers of Basic Education in U.P.

Mr. Chairman and friends,

I have not brought with me a written paper on the technical aspect of the training of teachers of basic education. I thought it would interest the conference more, if I gave

a short account of the general progress and working of basic education in U. P. I shall therefore endeavour to give you an outline of our work in the United Provinces.

In March 1938, a committee was appointed by the government to make recommendations to the government for re-organization of education in all its branches. While this committee was still in session it recommended that the work of basic education be started in the province as an experimental measure.

On the 29th of August 1939 a Basic Training College was opened in Allahabad. The first difficulty in the way of the introduction of this scheme was the fact that there are 18,000 primary schools in the province, in which nearly 30,000 teachers are employed. These teachers are ill-qualified and many of them have not received any sort of training, yet it would be cruel to dismiss them immediately. Therefore the problem was to find ways and means of re-training these 30,000 teachers to meet the requirements of basic education.

It was decided that those students who successfully completed their course in the Training College at Allahabad should impart training to these ordinary teachers. For this purpose only graduates were admitted to the Training College.

In the first place forty-five students joined the Training College. We began training them on the lines of basic education, but we had still to consider the question of what would happen to these trained teachers if the basic experiment failed. It was therefore decided that some old subjects should be taught as well as the new curriculum so that if this scheme failed the trained teachers might be absorbed in the old-type schools. Thus the students were taught according to basic principles in the morning and on traditional lines in the evening.

For the first month only the basic craft was taught, for the teacher's proficiency in his craft is the first essential for the success of the scheme. Work in cardboard modelling, spinning, and agriculture and gardening was started.

After a few months it was felt that a practising school was essential for the training of teachers and we opened a

basic school as an experiment. The first two grades of a local municipal school were transferred to this new school and children were taught according to the basic syllabus. In the beginning we faced many difficulties, specially in craft work, but as our work proceeded we gradually solved our problems through the experience of our work.

In January 1939 we decided to give basic training to vernacular teachers also. We invited—two from each district—a total of 98 men from 49 districts. For three months we trained these teachers in the principles of basic education, craft and correlated teaching.

We then felt that this training should be given to girls also and so a Basic Training College was started in Benares in September 1938. Thirty-six girls joined in the first group. Later on this separate college was found to be unnecessary and the women teachers were admitted to the Allahabad College.

We took a further important step. We began to lay stress on the art work as well as craft work, for two reasons. Firstly, the existing schools, training schools, and colleges, make no attempt whatsoever to arouse the aesthetic side of the pupils. In the first batch of forty-five students who joined the Allahabad Training College, forty-three had never touched the brush in their lives. We felt that unless the aesthetic sense of the pupils was developed during the process of craft-training we should only create stereo-typed craftsmen lacking in imagination. The primary school is always the shabbiest building in the village. Through these trained teachers we wanted to bring some beauty into primary schools and thus into the life of the village. Secondly, when 18,000 primary schools in the province are converted into basic schools they will require charts, posters, and other illustrative material. We felt that if the teachers with an elementary art training could prepare this material themselves it would be a great gain both economically and educationally.

From January the curriculum in the Training College at Allahabad was brought fully into line with the scheme of basic education. The students were divided into seven groups each group being asked to specialize in one particular craft. At the same time the students were expected to gain

a general knowledge of the other crafts taught in the college. General science and social studies were made compulsory for every student. In addition there are three or four other subjects which are more or less on the same lines as those taught in training schools of the older type.

The students were examined in April to see if their progress was satisfactory. Doctor Zakir Husain was the examiner, and he was satisfied with their progress.

We had two alternatives regarding the general policy for the introduction of basic education. Firstly, we could start the experiment in a few compact areas and gradually spread basic education throughout the province. If we followed this line of action it would take us nearly twenty years to spread basic education throughout the province. Secondly, we could re-train the 30,000 teachers as quickly as possible in the methods of the basic syllabus. When these teachers had received the necessary training the province could adopt basic education without any difficulty, and the scheme would acquire such a force that subsequently no power could thwart its progress. It is true that this extensive progress could be introduced only at the cost of efficiency, but we hoped that with the course of time quality would also be added to quantity. There was another point to consider. If the experiment were introduced on an extensive scale and were later found impracticable, there was a possibility of tremendous waste. But this consideration did not weigh heavily with us, for we were convinced that no system of education could be worse than the present system, and that there was very little possibility of basic education doing any harm. Thus the government decided to spread basic education on a very extensive scale.

Basic training centres were opened in seven divisional centres for the re-training of existing primary teachers. The teachers were invited from every district. Forty teachers came from various municipalities. In all 250 teachers were re-trained in each centre, i.e. 1750 in the seven centres. In each case, six teachers were imported from the Allahabad College to train these teachers. Special teachers were appointed for craft training. Thus we began to impart training in short-term refresher courses.

When the work was under way we invited seven inspectors and seven deputy inspectors to study the working of these centres.

When the first batch of these re-trained teachers was ready, they were sent back to the villages to begin work in accordance with the basic syllabus in the first grade of the primary schools. A sum of Rs. 14 per head per teacher was sanctioned to purchase the necessary tools etc. This money was contributed by the District Boards.

The second batch completed training yesterday, that is, the 29th of October 1939. This batch is 1,750 strong. Up to the moment the experiment of basic education has been tried in 3,500 primary schools. The third batch must have joined up today. You will be glad to know that we are retraining not only teachers but also inspectors and other education officers. There are eight normal schools in our province. The teachers of these schools are also being retrained. For the next two years the training for the first two or three grades of basic education will be spread in this way.

This year 106 teachers are under training in the Allahabad Training College. Experiments are now being tried in leather work and pottery also. For teachers coming from hill areas wool-work has been introduced.

This is a rough picture of the work in my province. We have hopes that within four years we shall convert every existing school into a basic school.

From the 1st of November there will be sixty basic schools in every district, and ten in every municipality. All new schools will be 100% basic. Since we have had no experience of the full seven years' course we cannot say what problems we shall have to face when we open complete basic schools.

It has been fortunate that the principal of Basic Training College is also the special officer of basic education in U. P. In this capacity I have visited our half-baked basic schools and I must say that I have noticed great enthusiasm. The percentage of absence is almost nil. The percentage of wastage is also decreasing rapidly. Now the children have begun planting small gardens in school compounds and we

may hope that the schools of the future will be beautiful in appearance.

If we have achieved any measure of success in the work of basic education, the credit is in great measure due to our Minister of Education who is himself a trained teacher and thoroughly understands educational requirements. Under his alert supervision every member of the education department has displayed great enthusiasm.

Some people say that we are not following the basic syllabus as we should and are following our own path. This is not true. Our syllabus is cent per cent the same as the basic syllabus, except that we have made some increase in the syllabus of subjects such as art and arithmetic.

One of the major problems is how to obtain text-books. We tried to solve this difficulty by writing the books ourselves, and a guide book for teachers is already in the press. Nevertheless the difficulty of obtaining text-books and reading material for teachers is very great.

The chief difficulty however is that of finance. Village teachers are extremely poor people. We have to give them a stipend of Rs. 5 per mensem while they are away from home in the training centres. Roughly speaking the annual expenditure on basic education in our province is about Rs. 4,50,000. So far no provision has been made for this sum in the next year's budget, but we have been instructed not to bother about money in the work of basic education. We work in the hope that money will come somehow. Finally I assure you that whatever political changes may come over our province the work of basic education will never be stopped.

Shri R. D. Derasari, Principal, Basic Training Centre, Katargam, Gujarat next read a paper on

The Activities of a Basic Training School:

The three main problems that confront workers in basic education and on which the success of the scheme mostly depends are,

(i) whether the basic craft will supply full scope for educating the child,

(ii) whether the basic schools will be self-supporting, at least in the sense of contributing towards the expenses of the school, and

(iii) whether the right type of teachers will be available or can be trained who can be entrusted with the work of carrying on schools on the lines of the new scheme.

Out of these three problems the last mentioned one viz., the problem of training teachers is most acute. During the short time of one year, workers in basic education can say with confidence that the craft if rightly selected and rightly handled is likely to supply all the necessary opportunities of educating a child, at least in bringing him up to the level contemplated in the scheme, with a keener sense of duty to himself, to society, to the state and perhaps better equipped for a start in life with the knowledge of a productive craft. They can also say with confidence that basic schools will contribute something towards their expenses, howsoever small it may be. But it is not possible to pronounce a definite judgement on this problem of the training of teachers. The problem is a peculiar one. Here we deal with neither definite figures of production nor educational possibilities inherent in a craft. Here we have to deal with human material and their reaction to a new educational ideal and practice, mature human beings who have already undergone a certain process of education and have already fallen into a certain groove of thought and of life. The task before the trainers is the difficult one of bringing them out of these grooves. To-day we can only make certain general statements in the light of experience gained. The experiment has been carried over a year at different basic training centres.

At present three classes of pupil teachers offer themselves for training.

(i) The first year trained teachers who have passed their Primary School-leaving Certificate examination, have undergone experience in teaching village schools.

(ii) Those who have passed their Matriculation Examination and have very little or no experience in teaching.

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(ii) Those who have passed their Matriculation Examination and have very little or no experience in teaching.

(iii) Matriculates who have undergone first year training and have some experience in teaching.

The last group is a very small one.

In view of the ambitious syllabus of basic education the first year trained teachers who have passed only the school leaving certificate examination, seem to be ill-equipped for the work before them. It is evident that the cultural and academic attainment of these teachers requires to be raised to enable them to respond effectively to the new subjects they will be required to deal with. The matriculates with their knowledge of English, science and history are theoretically better equipped. Their outlook on life is expected to be broader and their general culture higher. But the implications of basic education lay stress, and rightly too, on village-mindedness of the teacher. During the course of their study the matriculates pass some years in cities, and the amenities of city life loom large in their vision when they think of their future career. On the other hand a first year trained teacher is generally attached to the village. My suggestion is that village-mindedness and a sympathetic outlook for villages rather than academic qualifications should guide us in the selection of teachers for training under this scheme.

Secondly, the atmosphere of a training school should be such as would give ample scope and opportunities for social work.

The Wardha Scheme expects children to be imbibed with ideas of true citizenship, to be active members of the society, able to repay in the form of some useful service, what they owe to it as members of an organized civilized community. This cannot be achieved at the hands of teachers unless they are specially trained for it. Here I shall try to describe some of our activities with the help of which we try to equip the future teachers with the necessary mental attitude and love for the work before them.

The craft, and the expected mastery over it, necessarily loom large in the Zakir Hussain Committee syllabus for training teachers. A thorough knowledge of the scientific principles involved in the working of it is given to the teachers not by mere class-room lectures but by day to day practice. The pupil teachers, as they proceed in the craft, note their

progress and attainment. Numerous problems arise in the working of the craft, in the solution of which the pupil learns principles of science. The machine goes hard or makes a creaking sound, the fly-wheel moves but the spindle does not rotate, the yarn breaks much too quickly, all these are utilized to teach principles of science, say of friction and the necessity of lubricating, the fixed proportion between the diameters of the fly-wheel and the pulley on the spindle, the want of humidity in the atmosphere etc.

Workers with machines know full well that they do go wrong. All these occasions are utilized to teach the class the principles of mechanics on which the machine is based. The craft of spinning gives ample opportunities of co-relation with arithmetic. Simple enumeration can be easily taught with the distribution of slivers or counting of *tars* or rounds; addition, multiplication and subtraction, with the progress of the individual in craft or with the work of the whole class; division with the finding of the count, and percentage with the finding of evenness. This knowledge is utilized in making schemes of correlated studies for the Practising School.

It is through the day-to-day practice of the craft that the pupil teachers are helped to form habits of concentration, accuracy, application etc. In the craft room discipline automatically comes from within. One is not put to the necessity of enforcing it from without. The attention of the pupil teachers is drawn to this so that they might utilize their own experience in the conduct of the schools under their charge.

I have already referred to the fundamental necessity of village-mindedness amongst pupil teachers, sympathy for the village folk who suffer because of their ignorance. This sympathy can be best roused by establishing contact with village people. We have started going to the villages in our neighbourhood.

In the beginning these visits were made to note points where service was needed. Having noted that we started going to the village in batches, singing religious songs or reading from scriptures, telling them stories from the Indian epics. This inspired in them a sort of confidence in us and when we started classes for them the adults responded in good numbers. The adult education class started with five

adults and soon rose to sixteen. We have found that workers in villages, even in the field of adult education, have to fight against

1. Prejudices regarding the intention behind these attempts.
2. Want of time and energy on the part of these over-worked people.
3. Drunkenness.
4. Question of facilities and expense on the part of workers.

In spite of these difficulties one batch of pupil teachers has been able to spread literacy to more than 35 people.

Another batch of our pupil teachers has successfully taught takli to the poor neighbours.

The problem which calls for immediate solution in the villages is the problem of unhygienic surroundings and filthy personal habits. Poverty and scarcity of water are amongst the causes that lead to these, but the great cause that is responsible for these conditions is ignorance. Our pupil teachers were led through the streets of these villages, their attention was drawn to the filthy surroundings in which some of the villagers lived. They undertook to clean them and set an example to these village people. This was done time after time with the effect that the village people have learnt to keep their surroundings cleaner than they used to be in the beginning of the term.

A sympathetic outlook for village folks is thus cultivated amongst our pupil teachers by literacy campaigns in villages, conducting night schools, cleaning excursions etc.

We had a number of public holidays some of which were of special interest to village people. Our pupil teachers organised dramatic performances illustrating the importance of the holidays and the real significance behind them. These were attended by over 400 people from the neighbouring villages. The occasion was utilized for the preaching of social reform and scenes were enacted showing the result of evils like drink, untouchability etc. On the occasion of Ganesh Chaturthi and Balev the real significance of the holidays was explained to the village people through popular

lectures. These were attended by hundreds of people from the villages.

Our pupil teachers are thus shown how to organize correlated schemes for social service in the villages.

Our pupils sing country songs in class rooms and when they go to villages for work. They sing marching songs when they go out on long cross country walks, for village uplift work, or nature study excursions. Passages from modern literature, poems from up-to-date magazines are placed before them. I would like to mention one or two more special features of our training centre before I close.

We have a heavy day's work. All the work of the library, dispensary, kitchen etc., is organized by pupil teachers in small committees elected by the pupils themselves. This introduces them to the rights and obligations of citizens in corporate bodies.

In spite of the heavy programme the students are encouraged to find some spare time for the pursuit of hobbies. Fortunately we have a few enthusiasts amongst us who knew one or more handicrafts before they joined us. These have been elected as group leaders and the other students have been divided into groups of 7 each—each group following one particular hobby. Delegates and visitors who are interested may see in the exhibition the samples of bedding straps, bedding strings, mats, narrow and broad tapes, chair-carpets, card board boxes, trays, toys etc. made by our pupil teachers from waste material, in some cases from local produce of grass and leaves which can be had for nothing from yarn spun in our own centre and in one case only from raw material bought from the market.

With the help and guidance of teachers students prepare their schemes of correlated studies before they go to the Practising School. Pupil teachers under training spend 40 minutes every day in the morning in physical training. They also play country games. Their record of physical fitness progress and attainment is maintained and I am glad to say that the class has shown a steady progress. There has been no case of serious illness during the term.

Every night before we retire, we meet in prayers. There is a heart to heart talk with students every evening, as a

result of which there has been no mis-understanding and no occasion for punishment.

We all know the Sanskrit maxim.

"A word perfectly mastered and perfectly practised can fulfil all our needs."—The same holds true of one craft if perfectly mastered and perfectly practised. It can fulfil all the educational needs of a child.

Discussion

The subject was then thrown open for discussion.

Shri Sundaresan Iyer, Superintendent, Basic Training School, Coimbatore, Madras, placed before the conference for solution certain problems in connection with the training of teachers for the basic schools.

The first related to the question whether different types of training would be necessary for teachers in rural and urban areas. The problem resolved itself mainly into the problem of selection of basic crafts. The introduction of a number of basic crafts in rural training centres was out of the question. The most suitable crafts for them were spinning and weaving and possibly agriculture. In urban areas, on the other hand, there was scope for introducing a number of other basic crafts to supply the local demand. The conference should therefore consider the question whether it was desirable to have separate training schools for urban and rural areas.

The next problem was that of complete or incomplete training, whether it was desirable to give a preliminary training to future teachers, send them for a period of field work and then bring them back to complete their training, or whether it was desirable to give them a complete training at a stretch.

The third related to the question of the minimum educational qualification that should be insisted upon in the case of teachers. There was diversity of practice in the various provinces. If they insisted on matriculation as the minimum qualification, the problem of the teachers already in service remained to be solved. In his opinion, it should be possible to re-train a large number of the existing primary school teachers.

The re-training of teachers raised the question of their maintenance while receiving training at the training schools. In Madras a large number of schools were privately managed, and private proprietors did not usually give stipends to their teachers while under training. These teachers, being poor, should be given some stipends while they were under training. The teachers that had already joined the basic schools had joined them out of their enthusiasm, but the same enthusiasm could not be expected of all. Some inducement, therefore, should be offered to the first batch of teachers who would be selected for training.

Mr. Mukhtar, Principal, Training School, Srinagar, next raised the problem of the period of training. In his opinion, the minimum period of training should be a year and under no circumstances should the quality of work be sacrificed for the sake of speeding up the pace of introduction of the experiment.

As to the problem of rural and urban training schools, he suggested that provision for both types of training should be made in the same institution by introducing a number of basic crafts, and there should be no distinction between rural and urban training centres.

As regards the introduction and expansion of the scheme, he was of opinion that opposition would come from the department itself and unless the members of the department including the inspectors and the deputy directors co-operated with the teachers of basic schools the experiment would not bear fruit. He insisted therefore that the re-training of the existing staff of inspectors was an essential condition for the effective working of the scheme.

Kaka Sahib Kalelkar, Wardha: referring to the difference of opinion regarding the extensive and intensive methods of spreading basic education, and incidentally the training of teachers, suggested that the most profitable method would be to let the two types of experiments work side by side, and learn by experience.

He also pointed out one fundamental difference between the orthodox system and basic education. Under the former the inspector occupied the centre of the educational picture, and he was the deciding factor in the working of the schools.

Under the new scheme, the teacher and not the inspector will be the deciding factor and therefore the teacher and his training holds the central position in the scheme of basic education.

Prof. N. Kuppuswami Iyengar (Formerly of Teachers' Training College, Trivandram.) remarked that the introduction of basic education need not be unduly delayed on the plea of the lack of trained teachers. Education through practical manual work was not a new idea in pedagogy. The only difficulty was that the teachers were not trained in a craft. His suggestion was that during the transitional period until properly trained teachers were available, any intelligent teacher with the help of a local craftsman would be able to pick up in a short time sufficient knowledge to teach through the craft.

If, on the other hand, lack of properly trained teachers was a real obstacle to the spread of basic education, the problem of the training of teachers should be tackled in right earnest. Training Colleges and Schools should be opened in greater numbers throughout the country to train not only matriculates but also graduates, and a craft should be introduced as a compulsory subject in all secondary schools so that all the matriculates and graduates in future would be better equipped as teachers of basic education.

The third point he wanted to urge was that if they allowed English-teaching schools to exist along with basic schools, children would be attracted to the English-teaching schools. All parents were anxious to give their children education in English at an early age, so that they might enter college early. So, he would urge that in the interest of the spread of basic education they should not allow English schools to co-exist with the basic schools in any area.

As regards the suggestion that there should be different training centres for rural and urban teachers, he was against it for the same reason. It would be a reactionary step tending to perpetuate the present system of class education, in vernacular and vocational schools for the masses and English education for the classes. We must make no difference whatsoever between rural and urban schools except perhaps in the kind of craft chosen.

Dr. Abdul Hameed Kazi, Principal, Basic Training School, Jalgaon, next emphasized the importance of fostering moral qualities and a national outlook in our future teachers of basic schools through whom, he said, we hope to create a new life in our country, as according to the ideal inherent in basic education life of the class room was very intimately connected with the wider field of the national life outside. The teachers were to be the creators of a new culture, and therefore the most important factor in their training was the fostering of those moral qualities without which no revolution can be brought about either in the lives of the children or in our national life.

While emphasizing the necessity of a high moral standard in our future teachers, we must remember at the same time that we cannot hope to get men of such standard in large numbers unless we can raise the social and economic standards of our primary teachers.

Secondly, he was of opinion that the minimum period of training should be one of two years, as the standard of knowledge of the first year trained teachers or matriculates was so low that they did not even know their mother-tongue properly.

Further, he said, these teachers must be given full opportunity after completing their training to work out their ideals in their own schools. Only in an atmosphere free from official red-tapism and inspectors' visits, can the qualities of teachers and children find a free outlet which will enrich the life of the school and of the nation.

Mr. E. W. Franklin, Principal, Vidyamandir Training Institute, Wardha, stated that the art of training of teachers of basic education presupposed an entire revolution in pedagogy. Here the aim was to build up an entire educational system round a basic craft, and to transform the teachers into scientific craftsmen. This purpose cannot be fulfilled by merely association of teachers with professional craftsmen.

Prof. Parsram of Foreman Christian College, Lahore, placed an unique proposal before the conference, that a few training centres of basic education should be opened where teachers may be trained along with their wives. He pointed out how difficult it was for bachelor teachers to do any

effective work in the villages and suggested that ther wives thus trained would be of great help particularly in the education of prebasic children and the women of the village. Such experiments have been made in other countries and might with benefit be attempted in India.

Shri Rajagopal Rao of National College, Masulipatam, was afraid of the danger that the real spirit behind the scheme of basic education might be lost sight of in the training of teachers unless training centres were all placed under the direction of the Central Board of Education, which was the real custodian of the scheme. He suggested therefore that some arrangement should be made so that all the training institutions may be placed under the unifying control of the Central Board of Education without in any way interfering with the free scope of the departments of education.

Miss Peterson (Porto Novo) stated that the Wardha scheme had been criticised very much by a women's conference in South India on the ground that it was not suited for girls. The scheme had been chalked out by men—may be great men—and they had kept the boys in mind. Every educational system in the world had more or less only the men in view——to train them as fighting animals. If the scheme of basic education was claimed to be a scheme with a new spirit, then they should not start with men only. If the old system of education had been bad for boys, it had been a hundred times worse for girls. It had taken girls out of their surroundings; and had not educated them to go into their homes and reform society from within. She would therefore appeal to the conference not to leave women out of the new scheme of education.

Shrimati Asha Devi wanted the conference to consider a problem which appeared to her to be one of the most fundamental problems connected with the practical working of the scheme—the problem of the process and the technique of the training of teachers. Basic education claimed to be a scientific, natural and psychological process, because it was an integrated process of education. It was based on the recognition of human nature as one whole. It appeared however from reports that in all the centres of training teachers for basic education, they were following the dualistic method:

they had a craft expert to give the necessary craft training and the other members of the staff to give lectures. Perhaps that was a necessary evil in the first year of the experiment. But as they had passed through the first year of experimentation and entered upon the second year, it was necessary for all the workers in the training centres to meet and decide upon the technique. Her own personal feeling was that unless the process of the training of teachers was also integrated like the process of education of the children, they would be making a serious mistake from the very foundation.

The president then summed up the proceedings in the following words:

The summing up of the discussion

Ladies and gentlemen, I have now the rather difficult task of trying to formulate what the Secretary has called the "Findings of the Discussion," and I hope you will sympathize with me in the difficulties that face me at this juncture. I did not think it necessary to interrupt the speeches of the delegates, because I thought that that was the only opportunity they would have of placing before the conference their own experiences in their various training institutions. And even in the other speeches, where there was a generous profusion of words, one could pick up ideas that might be useful. As the discussion has proceeded, I have taken down all points that appeared to me to be important and to which a certain measure of agreement seemed to be assured between the various speakers. I shall, therefore, take these points one by one, and, if I find that there is general agreement, I may take it that the point represents the generally agreed opinion of the conference.

One of the points raised in the course of the discussion was that training should be integral rather than bifurcated. So far as I have been able to gather, the general consensus of opinion is that it is better to provide this training at one continuous stretch and the minimum period of training should be one year.

In this connection, I should like to clear up a certain confusion that has been perhaps created with reference to conditions in the United Provinces. The mover of the dis-

cussion had explained—I think his point of view has not perhaps been fully grasped—that in the United Provinces at the basic training college at Allahabad, the training is for one academic year, and in the normal schools the period of training is two years. In the shorter refresher course of three months only trained teachers are admitted, that is, those who have received some kind of junior or senior training, and there is no question of taking untrained teachers for three months, and after that expecting them to work in the schools. The first finding, so far as I can understand, is that training should at least be given for one year, and it will be better to give it as an integrated whole. May I take it to be the general opinion of the conference?

The point was further raised whether it is desirable to have different types of training schools for the urban and the rural teachers. And I think all the members of the conference are practically unanimous in the view that there should be the same training schools for teachers of urban and rural areas. Various reasons have been given, and I think there is the further ideological reason that the more we can bring workers in the urban and the rural areas together and give them an understanding of their common problems the better would it be for the development of proper educational technique and proper educational ideology.

Another point on which considerable stress was laid by one of the speakers was the importance of making teachers 'village-minded.' That is an obvious point about which there is no difference of opinion, but I mention it particularly because that is a point which we have got to keep in mind, in those cases in particular where the training schools for various reasons happen to be located in the urban areas. All methods and schemes that can make the teachers 'village-minded' should be encouraged and worked out.

Stress was also laid, and I think all the members would agree, that a great deal of emphasis should be placed on art work in these training schools and an attempt should be made to correlate the craft work with the art work. If these are divorced and we merely produce mechanical craftsmen who have no aesthetic sense of their own, then we would not be doing better than under a system of unintelligent apprentice-

ship. For this reason, therefore, generally the conference is of the opinion that teachers should become as good craftsmen as is possible under the circumstances. I do not think much support would be found in the conference for the idea put forward by one of the speakers that a teacher plus a craftsman could do as good work as a teacher who himself was trained as a craftsman. If we are going to develop the technique of co-ordinated teaching, we do not really want two sets of people. We want teachers who themselves would be able to do direct teaching through craft and employ its full educative and aesthetic value.

Then, the important point was raised whether the process of the training of teachers, and incidentally the process of the development of basic education, should be intensive or extensive; should we go in for quality or for quantity? On that point Kaka Kalelkar has expressed what I consider would be the general opinion of the conference that an attempt should be made to try both methods, in view of the fact that we have a tremendous amount of work to do. There is a great deal to be said for what the people call the "Bata" method of spreading basic education. On the other hand, as educational workers who want to look at the problem from the scientific point of view also, I think there is a great deal to be said for working under more or less controlled, experimental conditions. And although the suggestion was not made by any member of the conference, I put it as a suggestion that might be accepted by the conference, that a suitable compromise would be that where attempts are made to spread education quickly by giving the education through teachers trained in the existing training colleges, there should also be a few full-fledged basic schools working under controlled, experimental conditions, where methods may be tried and curricula of teaching imposed and materials prepared, and the benefit that is gained from working under those conditions should be gradually made available to the ordinary schools which are not so fortunately placed. In that way, perhaps what we gain through intensive work could gradually be taken over and spread into our ordinary schools.

And finally the point was raised by Shrimati Asha Devi as to the technique to be employed in the training of teachers.

The gist of her problem was, should we try and provide the training of teachers on the same basis as the teaching we provide at present in the basic schools, namely, make some craft the centre of instruction and work out all our methods of education, all our understanding of child psychology from that craft, or should we try and deal with these two things as separate though inter-related? I should have liked the conference to discuss the point, but as time could not be got for discussing it, I shall place my own view. It would be difficult if not impossible, and certainly likely to be confusing, if we try and introduce literally the method of co-ordinated teaching of craft and other subjects in our training colleges. The reason why we emphasize the co-ordinated method of teaching in our basic schools is that the child is at such a stage of mental development that his acquisition of knowledge must follow from his preoccupation with interesting practical activity. For him, most essentially theory follows from practice. In the case of the teachers, who have attained a certain degree of intellectual maturity, insistence on the same thing is not equally necessary. In their case, theory and practice may be given concurrently. So far as craft is concerned, all that they need to understand is the value and the artistic implication of the craft work that has to be done by the students in their schools. Therefore, both from the point of view, to a certain extent, of the difference between the psychology of the adult and the child and from the point of view of the practical difficulties, we shall have to separate the two: make provision for the teaching of a craft and make the teachers understand the psychology of the craft, and side by side make provision for instruction in the various topics and principles of psychology which rightly belong to training schools and colleges.

TRAINING OF TEACHERS

(Second Session)

The discussion on the training of teachers was continued on October 31, 1939 *at* 9 *p.m., Shri Aryanayakam presiding.*

Shri Aryanayakam opening the discussion remarked that the sessions of the Conference would come to a close the next

morning at 11 a.m. after the findings of the Conference as a whole have been recorded. He thought however that many members of the Conference felt that the papers read and discussions carried on in the Conference so far had been of a general nature, and a number of questions of practical nature had been left untouched. He suggested therefore that a special session of workers only might be held the next day in the afternoon to discuss these practical problems where they would pool their experiences together, frankly admitting their failures and making an earnest attempt to face the problems.

Rao Saheb Ram Saran Upadhyaya, Head Master, Basic Training School, Patna, seconded the proposal and suggested that this particular session might be utilized for formulating the issues to be discussed at the special session of workers. He suggested the following problems for discussion:

1. Whether the minimum period of training of one year that was agreed to would be sufficient and whether agriculture should also be taught as a basic craft during this year.

2. How far their experience had found the existing courses inadequate or insufficiently tackled.

3. What was the system followed in the different training institutions about the practice teaching work, and what amount of time should be devoted to it.

The first problem selected for discussion was that of practice-teaching in Training Schools.

Shri R. S. Upadhyaya was of opinion that the former system of limiting practice teaching to small periods of about 40 or 45 minutes was not adequate. It was necessary to allot a full day—half a day in the morning and half a day in the afternoon—for practice teaching work.

Mr. Mukhtar, Training School, Srinagar, also agreed with Rao Sahib Upadhyaya that, while the actual number of lessons should be reduced, more time should be given to pupil teachers for practice teaching. He added that they were giving 70 lessons to every individual pupil teacher, and they had about 102 pupil teachers. So, the number of lessons that had to be done in one year came to about 4,000. He preferred therefore to reduce the number of lessons and concentrate more on quality than quantity of practice teaching.

Sjt. Tomar, Superintendent, Vidyamandir Training School, Wardha, also agreed that the periods that were allotted were entirely inadequate, and a full day should be given to a pupil teacher for practice teaching.

Shri Aryanayakam said that they should obtain the experience of every school before they decided a particular issue. He thought the purpose might be achieved if a number of schools were started within the radius of 4 to 5 miles with competent teachers, who might be trusted to guide the pupil teachers. He, however, thought that the child's interest was the paramount consideration to be kept in view by every teacher. The pupil teacher should gain experience, but not at the cost of the child's interest. It was the duty of the permanent teacher of the practising school to watch that the child's interest was maintained.

Sjt. U. S. Tomar thought that the pupil teacher should be given full scope. He should be allowed to watch the teaching of the class by the permanent teacher for a day. He should be allowed to see his notes. Then he should be allowed to prepare his own notes, and only after a couple of days of such experience should he be asked to take up the class under the supervision of the permanent teacher.

It was agreed that practice teaching should be allotted by days and not by periods. The pupil teacher must be given one or two days for observation and then he should be given one or two days for practical work.

Sjt. Mohoni remarked that the point was more or less a question of time-table. The principle having been agreed, the details should be adjusted according to the needs of each locality. He suggested that municipal schools might be brought under the control of a training centre if the Municipality concerned was agreeable, and thus the field of activity could be increased.

The question of contact between the pupil teacher and the permanent teacher or supervisor was then taken up for discussion.

Shri Aryanayakam said that the gulf between the viewpoint of the pupil teacher and that of the training staff being a very wide one, the permanent teacher was in a better position to help the pupil teacher, because he was on the same

footing. So, he considered that the pupil teachers would derive more sympathetic help from the permanent teachers than from the supervisors.

Rev. Harper of the Rural Workers Training Centre, Moga, also agreed with Shri Aryanayakam. He suggested that the pupil teacher should be asked to keep his notes, and they should be checked by the supervisor.

Then the question of duration of courses for the pupil teachers was considered.

Shri Aryanayakam remarked that the minimum period of training had been fixed as one year for trained teachers for teaching two grades of the basic course.

Sjt. Tomar said that one year would not be sufficient, if all the knowledge was to be imparted, because half of it was likely to be taken away by the teaching of craft. He wondered how in the short space of one year subjects like psychology, physiology, philosophy of education, school management etc. were to be taught.

Shri Aryanayakam remarked that although these subjects were taught in normal schools today, the teaching was formal and academic and very little opportunity was given to the pupil teacher to handle children and observe their psychology. Mere theory was taught but there was hardly any application to the practical side. Under the existing system however less time will be devoted to the theoretical teaching, and more emphasis will be given to the practical application of these aspects of pedagogy.

Prof. Parasram agreed with the view expressed by Shri Aryanayakam. He also thought that real knowledge of psychology was to be gained through observation, and that method was not followed in the existing system.

Sjt. Bombavala thought that it was not necessary to allot separate time for the training in psychology. If training in other subjects and craft were imparted systematically and intelligently, the pupil teacher would be able to get a sufficient knowledge of human psychology so as to be able to manage his class.

Rao Saheb Upadhyaya reminded the Conference that the issue before it was the minimum period of training under the basic system. It was the agreed view of the Conference that

the pupil teacher should be thoroughly equipped in craft. He thought that if all the subjects were to be thoroughly taught, the minimum period should be two years.

Shri Aryanayakam said that a recommendation of that kind had been proposed and accepted in C.P. An untrained matriculate was to be trained for one year and sent to do field work under the direction of a headmaster. There he worked for two years and came back for another year's training. Thus, in all he got four years' training.

TRAINING OF TEACHERS

(Third Session)

A special session of workers met on 1st *November at* 2-30 *p.m. Shri Aryanayakam presiding.*

Shri Aryanayakam placed before the Conference for reconsideration the two problems discussed on October 31, viz.,

1. The number and duration of supervised practice teaching lessons for pupil teachers.
2. The minimum period of training.

He suggested that they might discuss those two points and arrive at some agreement.

Dr. Khan of Basic Training College, Allahabad, who opened the discussion agreed that the question of the minimum period of training was one of vital importance. He accepted that a complete training of 2 or 3 years was absolutely necessary in order to equip teachers fully to teach the Basic syllabus. But, under the present circumstances, he did not see how such training was to be given, as there was no basic school in existence which had worked the complete basic syllabus for 7 years and they had at present no complete picture before them of the full working of the Basic syllabus. Besides, an important aspect in the training or re-training of primary school teachers was a re-orientation of their mental outlook, as most of the primary school teachers were of the vernacular final standard and their cultural and intellectual outlook was very limited. It might be possible with the help of short term courses, or re-fresher courses to bring about this revolution in the mental outlook. He differentiated the

practical working of the scheme into two parts; one bearing on the organization of the primary schools in the province and the other the actual introduction of the basic syllabus in the new schools. He wanted the Conference therefore to decide whether the training was to be given in bulk or in convenient parts. He suggested that though the Conference had accepted that the training be given in bulk, still during the transitional period, permission should be given to introduce training in parts to suit local conditions.

Shri Aryanayakam agreed that there was no school that could serve as a model school which had worked the basic syllabus for complete seven years. All the same, he was of opinion, that there was no reason why they should not fix the period of training as they found suitable from past experience.

Shri Lakshmishwar Sinha of Vidyamandir Training Institute, Wardha, was of the view that the question of time was of minor importance. They should concentrate on the quality of training that the teacher should receive. Unless the teacher was really capable and well trained he would not be able to take up the lowest classes as the highest capacity and understanding of children was necessary for teaching the lowest classes.

Sjt. Nimbkar, Head Master, Basic Training School, Loni, observed that two years' teaching was absolutely necessary. The teaching should at least be perfect in the craft.

Shri Aryanayakam remarked that as basic education was in the experimental stage, no problem could be decided theoretically but had to be solved on the basis of actual experience. He suggested therefore that a complete two years' training should be given in one training centre, while another training school should divide the training into a preliminary training of a year, two years of field work in basic schools and the final training of a year. After two years of practical experience when both these courses had been completed they might be able to see the difference in the progress made by teachers in the two different training schools. The results may then be compared and the more efficient system adopted.

Sjt. Dixit of Vidyamandir Training School, Wardha, remarked that in the Wardha scheme the spirit and ideology

counted for a great deal. From that point of view, he thought that training for as long a period as possible should be given to teachers, and care should be taken to see that the teacher concerned imbibed that spirit of ideology. So, he was of the opinion that at least two years' training was necessary.

Sjt. Manoharlal, Basic Training College, Allahabad, said that he failed to understand why Sjt. Dixit thought that a particular period, viz., of two years was necessary for the teacher to imbibe the spirit or ideology. According to him, in case of some teachers one year would be more than sufficient, in some cases a day would be sufficient while in certain other cases seven years may not be sufficient. So he considered that that was not the correct criterion to decide the period of training.

Shri Aryanayakam observed that the sense of the Conference seemed to be that *training for as long a period as possible should be given.* The minimum period for new teachers might be temporarily fixed as one year, with liberty to extend it to two years if circumstances permit.

The next question discussed was the preliminary qualification required for the selection of pupil-teachers for training.

Srimati Asha Devi suggested that in the case of women teachers the admission standard of matriculation should be relaxed, because the essential qualification for teachers of basic education was not academic but an integrated attitude towards the craft of teaching. As woman's life was more of a practical nature than that of men, she was by nature and experience better fitted as a basic teacher than men.

Shri Aryanayakam was of the opinion that no academic standard should be laid down, but each centre should be left to judge about the fitness or otherwise of women candidates.

Shri D. K. Mohoni said that the point was very important in as much as they were committed to the minimum standard of matriculation. So, he considered that the Conference should record its opinion that the standard should be relaxed in the case of women candidates.

Miss Peterson thought that instead of laying down any academical standard, they might give an additional year's training to the women candidates. Such training was given in Denmark.

Sjt. Nimbkar, also thought that there should be no standard laid down, but each case should be decided on its own merit.

Dr. I. R. Khan stated that he had found by experience in his training school that in some cases trained matriculates were better than trained intermediates. Mere academic qualification would not make a man a better teacher even after training.

Mr. G. A. Mukhtar stated that in the case of women teachers they should not restrict admission to matriculates. They could hold an open test for admission, irrespective of the academic qualification.

Miss Indumati Chimanlal made a proposal that the conference should make a recommendation that there should be a minimum percentage of admission of women in the training school. There was a danger of the training schools not admitting women at all, unless special reservation was made for women teachers.

She further suggested that the local authorities should be compelled to send some women for training.

Shri Aryanayakam pointed out that the recommendation of the Zakir Husain Committee was that as far as possible basic schools should be run by women. If that recommendation was to be insisted on, the local bodies would automatically have to get more women trained.

Miss Indumati Chimanlal suggested that women should be given some inducement to get trained.

Rao Saheb Ram Saran Upadhyaya stated that in Bihar they were giving better stipends to women than to men—Rs. 20/- for women and Rs. 15/- for men.

Sjt. Nimbkar stated that they should give preference to women in regard to admission in training schools.

Shri Aryanayakam pointed out that there was diversity of conditions from province to province. The Zakir Husain Committee had laid down that women teachers were to be employed in basic schools, especially for the first four grades. The district boards might be requested to train a large number of women teachers for the purpose and, in order to attract them, give them stipends.

Miss Indumati Chimanlal suggested that in case women of the required educational qualification were not available, they should take women with lower qualifications and give them pre-training.

Sjt. Aryanayakam suggested that the Provincial Board for Basic Education might be approached in that connection.

The general sense of the Conference was that each province should meet the demand for increasing number of women teachers in basic schools according to the local conditions of suitable candidates available, without sacrificing efficiency. In any case the admission standard of matriculation was to be relaxed in the case of women teachers.

The next problem taken up for discussion was that of agriculture as a basic craft.

Sjt. S. C. Dixit asked how they were to train the teachers.

Sjt. Bhise replied that there were some institutions which could help them. He himself was working a high school where agriculture had been introduced as one of the subjects. He could train some in his high school. But that was a problem for the Provincial Government to solve.

Sjt. Dixit asked what time would be required to train teachers with agriculture as the basic craft.

Sjt. Bhise replied that one year would be quite sufficient.

Shri Aryanayakam enquired whether the Bombay Provincial Board, of which Sjt. Bhise was a member, had any programme to introduce agriculture as a basic craft.

Sjt. Bhise replied that the Provincial Board had not yet discussed the problem. They would discuss it at a later meeting.

Shri Aryanayakam pointed out that Sjt. Bhise might draw up a programme and then persuade the Bombay Provincial Board to run at least one model school. If that school proved a success, then other centres might take it up.

Shri L. R. Desai stated that agriculture could not be made a basic craft at least for the first five standards.

Shri Aryanayakam pointed out that Sjt. Bhise's idea was to make agriculture a basic craft in all the standards, instead of having it in the last two grades.

Shri L. R. Desai stated that he himself belonged to a family of farmers, and knew farming. From his experience

he would say that children between the ages of 6 and 11 could not do the major operations of agriculture. Even children of the age of 14 and 15 could not be expected to handle the plough and draw water from wells. Unless these operations were taught to the children, it was no use making agriculture a basic craft.

Sjt. Nimbkar agreed with Mr. Desai.

Sjt. Aryanayakam pointed out that the intention of the present programme was to introduce gradening in the first five grades as a subsidiary craft and agriculture as a basic craft from the sixth grade. They might gain experience of the present programme before taking up agriculture as a basic craft from the 1st grade.

Shri L. R. Desai pointed out that there was another consideration to be taken into account in regard to the introduction of agriculture as a basic craft. In the Katargaon training centre, they had made nature study a compulsory subject, and every teacher had to put in about an hour's work every day. The income was very little. Agriculture depended so much on weather conditions and rainfall.

Dr. I. R. Khan suggested that they might wait till the fifth year to consider the introduction of agriculture as a basic craft.

The next problem taken up for discussion was whether a separate syllabus was necessary for girls.

It was pointed out by one of the Lady members of the Conference that the Conference had not yet tackled the question of a separate syllabus for girls.

Srimati Asha Devi stated that as far as her experience went, up to the age of 12 there was no need for any distinction between the education of boys and girls. The study of physiology, hygiene and dietetics was necessary both for girls and for boys. After the age of 12 they might provide for specialization both for girls and for boys.

Mrs. Dani suggested that they might make domestic science compulsory for girls in girls' schools.

Srimati Asha Devi pointed out that their main problem was to deal with girls in the villages. Domestic science, as it was now taught, consisted of instructions in cooking, care of utensils, sewing etc., all of which presupposed a certain margin

of prosperity in the home. Village girls who always lived on the verge of existence would have very little occasion in their life to make any use of this knowledge.

Miss Peterson of Porto Novo admitted that the term "Domestic Science" always jarred in her ears when it was put on the time-table of a school. What she wanted that the girls should be taught was to make some improvements in their simple lives. They should be taught to keep a garden, so that they could add a little variety to their meals. They should also be taught what grains were nourishing and what were not. They should also be taught how to save a little every month. They could also be taught sewing. That is what she meant by domestic science. This could be taught in a simple way from the lowest class.

Mrs. Hanna Sen (Lady Irwin College, Delhi) stated that domestic science as taught in the big urban schools of Bombay and elsewhere did not constitute domestic science as a whole. There were certain other sections quite applicable to rural conditions. For instance, gardening. As pointed out by Miss Peterson if girls were taught how to keep small gardens in the little plots of land surrounding their huts, they would, when they grew up, be able to grow vegetables and make their food wholesome and well balanced. Then, there was needle craft. They could make the simple dresses for their children, and mend the torn garments. Then hygiene. Hygiene was a very essential part of domestic science. Of course, certain elements in it were common to both boys and girls. Another important section of domestic science which could be introduced in the basic schools was nursing and knowledge about infectious diseases. Children should be taught how to protect a family from contagion. Thus, those branches of domestic science which were applicable to rural conditions should be taught in rural schools. She personally felt that their village life could not be rebuilt unless emphasis was placed on the teaching of domestic science as far as girls were concerned.

Shri Aryanayakam remarked that the matter had been thoroughly discussed by the Zakir Hussain Committee, and they had come to the conclusion that no differentiation should be made up to the age of 12.

As for the syllabus of domestic science it seemed that the differentiation was one of terminology rather than that of matter. Of the subjects included in the syllabus of domestic science, gardening, and elements of physiology, hygiene and dietetics were already a part of the syllabus of basic education. So was a knowledge of infectious diseases and simple nursing. As for sewing and mending he did not see why it should not be taught to boys as well as girls.

The next subject taken up for discussion was the place of art in basic education.

Dr. I. R. Khan, Principal, Basic Training College, Allahabad, placed before the Conference a short account of the experiment being carried on under his direction. From the very beginning of the experiment he said, he had been of the opinion that training in art should form an essential part of the training of teachers of basic education. In the first place this would enable the teachers to decorate the craft work produced. Designing and decoration played an important part in weaving, wood and metal work, and cardboard modelling. Secondly a teacher with some training in art could prepare his own illustrative materials and teaching aids. Besides these utilitarian reasons, there was the more compelling reason of the educational value of free expression in art. They were fortunate in getting the services of Shri Manoharlal, who in addition to being a trained teacher was also a trained artist, and with his assistance an elementary training in art had been introduced in the teachers' training college in Allahabad. This training did not aim at turning out the teacher as a finished artist, but only to help the teacher to impart to the village boys a knowledge of decoration of craft work. The results of the experiment had been inspiring, as many teachers who had never touched the brush before had shown great promise as future artists, on the other hand many teachers with a little previous training had developed rapidly.

The next place in the experiment had been with the children. They started the experiment with the children of a Municipal school, a school in which the average intelligence of the children was low as compared to the other children in

urban areas. They introduced free expression in art leading to pattern making and designing. The colours used were cheap bazaar colours which could be used in every basic school. Only three periods a week were devoted to the subject, but their experience had been that the children took keen interest in the subject. Sometimes when the boys were doing their craft work, they would be given a period to decorate their craft work with the help of the material placed before them. They were trying to lay the foundation of a simple, inexpensive art room for the children, with panels all round the room which were being gradually decorated by the children themselves. This experiment was still in the making, and he did not know how it would develop later on but he felt that this was an important contribution that they were making to the scheme of basic education.

Sjt. Manoharlal, Art teacher, Basic Training College, Allahabad, stated that in the present age they had to democratize art, and this could only be done by making art the medium of expression of their everyday social experiences. In addition to helping children to decorate their craft work, art would also develop their personality. Education of the intellect, without the education of the feelings and imagination, would be of no value. A boy would feel nearer to an object if he was asked to paint it than if he was asked merely to name it and mention its qualities. In the teaching of art, they had divided the subject into three parts: (1) free expression, i.e. illustration of stories, (2) design, and (3) memory drawing. They were not attempting to teach drawing in the old way i.e. by means of illustrated free hand drawing books. A small child would not be able to make minute marks. Therefore, he had to be given a brush and liquid colours so that he might be able to move his arm freely. Stories from history could be told to children and they could then be asked to illustrate them in their own way. The material supplied to them would be a few primary colours and a brush. When the child had seen a few possibilities, the teacher would draw his attention to something that the child had seen or to some design in a book cover and ask him to copy it. In this way the child would be led to learning the art of colouring and decoration.

Dr. Abdul Hamid Kazi, Urdu Basic Training School, Jalgaon, also emphasized the point that art must play a very important part in their education if their programme of national education was to succeed. The economic aspect of education should not be stressed at the expense of the aesthetic aspect. He believed that Dr. Khan's experiment would prove a great contribution to their educational scheme. To colour and music they could also usefully add rhythm. The inner life of a child could be made richer by teaching him rhythmic movements. He would therefore suggest that besides art and music, dancing should also form a part of the syllabus of basic education.

Rajkumari Amrit Kaur winded up the proceedings of the afternoon. She said, "I am sure all of us who have come here must be congratulating ourselves because we have had the good fortune to come here. The discussions have terminated and I am delighted that they have ended with such a happy note—that we want to bring beauty into the lives of our children, and, through our children, into the life of this land to which we have the privilege to belong. I am sure we could all go away from here enthused about the work that we have in store for us."

(2) THE TECHNIQUE OF CORRELATED TEACHING

Octr. 30, 2 p.m.

The discussion on the technique of correlated teaching was opened by Professor K. G. Saiyidain who read the following paper on the subject.

The Technique of correlated teaching

By Professor K. G. Saiyidain

The inauguration of the scheme of basic education has given a rude shock to the self-complacency with which educational workers and administrators in India have been conducting school work for centuries and has compelled them to re-examine some of their long cherished postulates about educational theory and practice. I am not one of those unfair and unreasonable partisans of the new scheme who imagine that the educational firmament was plunged in utter darkness before this scheme took shape, and since then it has been, or promises soon to become, one uninterrupted blaze of light. I am quite aware that the ferment of educational reform has for years been working slowly and often unperceived in schools and training colleges, and sometimes even in administrative circles also. But these scattered points of light were few and far between. Usually the adoption of new methods was looked upon as an individual fad which did not affect the rest of the educational world. Certain subjects of study had been taught for ages; certain methods of teaching had acquired the force and sanctity which belong to old traditions. The average teacher was inclined to think that what was good enough for his predecessors was good enough for him and there was no reason why he should run after new-fangled fads. Thus was the mental laziness and inertia of teachers rationalized and generations of children were taught, and are being taught, by methods for which no psychological justification whatever can be offered.

Mahatma Gandhi, however, has the knack of challenging thrice-guarded orthodoxies and of carrying controversies

from the cloisters of the specialists to the open market-place, where scholastic niceties look less nice than they did in the dim light of the cloisters, and common sense tries to assert itself more vigorously and successfully. He recalled to the mind of the educationists the need for relating education to the realities of life, and planting its feet firmly on the soil of the village which, after all, is the backbone of Indian life and culture. He advocated an education given through selected village handicrafts such as spinning, weaving and wood work. This was a point of view which certainly threatened the sacred supremacy of the written word and the text-book in the field of education, but was within the intelligent comprehension of the ordinary villagers, who had so far been unable to see how the education given to their children in schools impinged on their life at all. They might prize it for reasons of social snobbery or because it held out a remote, and usually illusory, hope of their children getting some clerical service in the town, or because knowledge for its own sake has, even today, a certain value for the Indian peasant. But his shrewd native wit could not appreciate how the learning of certain subjects or certain technical skills made the village lad into a better and more efficient citizen and cultivator. On the contrary, his experience and observation pointed to the conclusion that this education tended to alienate educated youth from the life and labours of his fellow men.

In the course of this short paper it is neither possible nor necessary to survey the various features of the scheme. I propose to confine myself to one of its several important features i.e. the technique of coordinated teaching which, the Report of the Zakir Husain Committee suggests, is the only suitable method whereby the full intellectual value of the new syllabus can be exploited. In order to appreciate the significance of this method it is necessary to bear in mind the nature of the new syllabus, which is built round three integrally related centres: the child's physical environment, the child's social environment and the selected basic craft. This gives the syllabus a unity which it did not possess before. What may be broadly described as general science interprets the physical environment; social studies interpret the social environment; craft provides their natural convening point,

since craft work utilizes the resources of the physical environment for the purposes that relate to the social environment. Language and drawing represent the expressional side of education which is useful in all directions. How can we evolve a method of teaching which will be in consonance with the spirit of this scheme? The basic craft chosen provides a natural starting point for the teacher, because the child is by nature a pragmatist and loves activity. Long before he has acquired sufficient intellectual maturity to understand the meaning and purpose of the various school subjects which figure in the curriculum, he can, and does, take interest in various kinds of practical work and the crafts which sustain life around him. The proper psychological approach for developing the child's intellectual powers consists in engaging him in activities connected with craft work and, thereby, training his powers of observation and judgment as well as his practical aptitudes. As the child comes in contact with the raw materials and tools which he has to manipulate, the teacher has numerous and rich opportunities for adding naturally and gradually to the child's knowledge of his physical and social environment. If the teaching of craft is intelligent and not mechanical, the child will naturally feel interested in the study of his raw material, its origin and distribution, the processes employed in transforming it from a crude to a finished condition, the appliances and sources of power used in these processes, the conditions under which the workers connected with them carry on their life and activities. As the child's knowledge and experience grow, as he acquires the capacity to read and write and his range of interests becomes wider he is naturally impelled in the direction of understanding "the why and wherefore" of the processes going on not only in school, but also outside the school. The result is that the child's mind is not confused with a number of readymade, logically arranged "subjects" whose *raison d'eter* is incomprehensible to him; he is rather led along the direction of his own curiosity and intellectual interests till, in due course, the miscellaneous items of knowledge acquired begin to fall into their proper places and the growing child is able to distinguish the significance of various subjects. This is a psychological principle of great importance; it is based on the fact

that the child's mind is an integral whole, welcoming experience as a unity, not as a collection of separate unconnected fragments. To the young child, the traditional division of the curricula into "subjects" which are not only unrelated to one another but are also out of touch with the pulsating realities of life is often quite unintelligible. The technique of correlated teaching, on the other hand, makes the craft work of the child the starting point of his learning and, just as a powerful magnet attracts to itself scattered iron filings and introduces order and system into them, similarly the focal and expanding interest in craft activities enables the child to acquire and assimilate the relevant knowledge of history, geography, civics, general science and other important subjects. Moreover, it gives to the child's knowledge greater correctness and reality and saves it from that formal compartmentalization which makes it both dull and meaningless. Craft thus becomes a centre from which emanate many rich and progressive human interests, some historical, some geographical, some scientific, all finding their satisfaction in due course in the specialized study of different branches of knowledge. This point may perhaps be made more clear by means of an illustration which is designed to show how, through this technique, the child can gradually acquire any amount of rich, significant and worth-while subject matter from an apparently trivial beginning, provided, of course, that the craft is wisely chosen, touches life at many points and offers possibilities of educational development. Let us take, for example, a cotton project involving the cultivation of cotton, observation of its growth, its spinning and weaving, the study of the various processes employed in manufacturing cloth and other articles. There is an infinitely rich field for the teachers of history, geography, science and even mathematics and languages. They will not, indeed, find here the royal and easy high road of text book teaching which often eliminates the labour of thinking on the part of the teachers and the taught. But they will discover, if they have the intelligence to do so, something which is of far greater value in the education of the growing human being—namely, the possibility of subordinating knowledge to action, intellect to life, logic to psychology and pedantry to common sense. The geographer

can study the distribution of cotton over the globe, the climatic factors which favour its growth, its import and export, the processes of manufacturing cloth and their development, which will incidentally bring the Industrial Revolution within their ken. The history teacher will interest the child in the manifold ways which man has adopted to protect himself from the rigours of climate, of the part played by cotton clothing in various ancient civilizations—a window which may give many valuable and fascinating glimpses: the development of the cotton industry in India, her flourishing trade with the West, its repression and decline under the East India Company—a Story of tremendous political and economic significance—the more recent development of cotton factories, the Swadeshi movement, India's economic relations with Japan and Great Britain. On the scientific side there will be chances of gaining useful knowledge about botany, physics, chemistry, agriculture and climatology at every step, as the child studies the sowing of seed, its germination, the growth of a plant and its flowering, the tools and appliances, and sources of power used at different stages of its transformation and manufacture into cloth—a truly "general science" course, emanating from a single interesting centre. Then there is the "romance of the spinning wheel," the folk songs associated with harvesting and with spinning and weaving, the rural economy of life in which it plays such a dominant part, the numerous mathematical calculations from the simple counting of rounds of yarn to calculating the huge weight of debt and interest borne by the poor cultivators, the economic legislation which is being attempted on their behalf in different provinces. Can any one doubt that, in the hands of an intelligent teacher who understands this technique, the project can develop into a treasure-house of useful, correlated knowledge, perhaps spread over a number of years? And even in the hands of an ordinary teacher, it will help to make the process of education more practical and therefore, for the child, more lively.

There is, however, one important precaution which teachers who experiment with this method should constantly bear in mind. Their approach is fundamentally psychological *i.e.* according to the laws of the child's mental development.

But their ultimate goal, so far as the intellectual aspect of education is concerned, is logical *i.e.* they have to aim at building up in the child's mind, in due course, a coherent and systematic structure of knowledge. In other words, they have to conduct their teaching in such a way that knowledge, which is acquired psychologically by the child, gains scientific organization. The project method and the technique of coordinated teaching make the teacher's task much more difficult because, while presenting to the child the psychological facade of the process, he has constantly to think how, in view of his objective, he can build a safe bridge from the psychological to the logical. The difficulty, however, is well worth facing, because the only other alternative is to sacrifice the child's interest, activity and spontaneous enthusiasm—in fact all that makes schooling educative—to a mere formalism, a shadow which has no substance. It demands mental alertness and vigilance on the part of the teacher, a capacity for constant stock-taking of the child's acquired knowledge with reference to the requirements of the syllabus, and the ingenuity to create interests, situations and stimuli which will lead the child happily to the desired goal. Teachers who throw themselves into this crusade for a better education should courageously take up the challenge of this difficult task, for the Providence that has created this universe had ordained that nothing should be significant or worthwhile which does not call for strenuous effort and sacrifice.

Kaka Saheb Kalelkar's talk on "This new method"

The scheme of basic education has brought into the field not only a new philosophy but also a new method of education.

A clever barrister while arguing his case weaves into his brief a fair amount of legal knowledge. His purpose is not to teach law but to establish his case. Yet like an artist he must decide upon the right proportion of legal knowledge necessary for his purpose (for a shade too much or too little will spoil his case), and the right psychological moments when to introduce them and the most attractive method of introduction. Thus, if the barrister knows his job, even a layman attending the courts, purely for the fun of it, will in time unconsciously acquire a fair amount of legal knowledge.

This is the method of correlation. When a piece of knowledge or information comes to us as a part of some interesting experience, the process of assimilation is natural or unconscious. The task of a good teacher of basic education is the same as that of a good barrister. He has to weave into the teaching of the basic craft as much of knowledge and information as is necessary for his purpose. Thus he must not only have a complete knowledge of his own subject but also must know the art of correlating it with all aspects of knowledge necessary.

The exact nature of this new method—the method of correlation—is not yet clear to all, and is often confused with association of ideas. But the difference between the two is a fundamental one. While one is based on facts, the other is purely psychological. It may or may not be based on facts and may lead us into the wilderness. It is therefore not a reliable method for education.

This world we live in is so arranged that each phenomenon is connected directly or indirectly with another. The teacher's job is to discover and utilize this connecting link for the purpose of education. This does not require scholarship of a very high order. If the teacher is a living individual and has a little knowledge of everything he can make a good teacher of basic education. The dwellers in the forests, whom we commonly describe as wild or primitive, know this art. Their very survival depends on this knowledge. Those who would live must provide themselves with all the necessaries of life. They must know how, where, and when to acquire them. They are constantly faced with the problems of "how" and "wherefore". The third problem—the problem of "why" proves too intricate and thus they lag behind in the race as "wild" or "primitive". In the race of life only those will march forward, who constantly ask themselves the three questions of "why", "how" and "wherefore" and attempt to answer them. The new method of correlation is nothing more than an attempt to introduce this art of life into the field of education.

This technique of correlation can take us very far into the world of knowledge, and when we try to educate the child through a handicraft we can bring all the knowledge

in the world to him through this simple and natural process. For, what is a handicraft? A handicraft is the process by which a man takes the raw material from nature, and with his skill and intelligence transforms it into an object of use for human society. Thus it forms a process through which a child can be introduced to the world of nature, to the skill of man and to human society and its needs. There is no branch of human knowledge which is not covered by these three aspects of human life. Where this relationship is not obvious, there should be no forced or artificial attempt at correlation.

We are often asked: "We may teach the arithmetical processes through spinning, we may give some knowledge of cotton, we may even teach some science but how is it possible to teach history or the social sciences through spinning? How is spinning with takli connected with these sciences?"

Once I was asked this question in Gujarat by a student who was a fisherman by caste. I answered that the whole history of human evolution has been the story of the progressive attempts of man to keep himself warm. The primary function of food is to keep the human body warm. When the primitive man learned to clothe himself, he needed less food. He needed to kill less animals for self-preservation: this was the first step in the story of human culture.

Clothing made man independent of the changes of seasons, brought more light and air into his dwelling. Gradually clothing increased and man weakened. The story of human evolution is thus closely interwoven with the story of clothing.

From skins of wild animals to woollen garments and from wool to cotton is the story of human evolution. After agriculture this is the greatest of human industries. Emperors have learnt the art of weaving and the queens of all nations have throughout the ages been fine spinners.

This cloth brought Europe into touch with India. It is cloth that binds India and Japan together.

After a long experience of national education we have arrived at the conclusion that intellect is developed better through practical work than through the reading of books. Bhartrihari, the royal poet, said long ago; बुद्धिः कर्मानुसारिणी —"The intellect follows close upon the skill of hands."

The Bhagavadgita said long before him that action (Karma) ripens into knowledge (Jnana). Activity helps knowledge and knowledge helps skill of hands. The scheme of basic education is an attempt to develop knowledge through activity. What Gita has defined as Jnana however is higher than knowledge; it is culture.

If we think a little deeply we shall realize that this scheme of education is the greatest contribution of this age; it is a step forward in the story of human culture—it is a way towards the democratization of culture.

The following papers were then read on the different aspects of the problem.

Correlated teaching of Arithmetic (Spinning)

By Sjt. L. R. Desai, Special Officer for basic education, Bombay presidency.

Educationists agree on the soundness of the principles underlying the Wardha Scheme but many of them are still sceptic about the teaching of subjects through a craft, or what is technically known as correlated teaching. Their scepticism is genuine and mainly due to their very different outlook. They have all been used to present-day teaching. Their attitude towards knowledge is subject-wise. They often think in compartments. Although they often make a pretence of considering all things from the child's point of view and rationalizing their methods and procedure according to the needs of the child, their pedagogical thinking is based on logical sequence, methodical treatment, subject lessons, the technique of teaching and many other things which do not wholly fit in with child-nature and the child-mind.

Activity or craft-centred teaching differs broadly from the present-day class teaching in the following:

ACTIVITY-CENTRED TEACHING	PRESENT-DAY TEACHING
Psychological	Logical order of topics.
Natural	Artificial-brought in somehow, because logical order requires it.
Centred round an activity	Subject-wise.
Free teaching based on environments.	Time-table ridden and mostly in the class-room.

The above points of difference are so material that a compromise between the two is difficult though not impossible. A teacher steeped in the present day teaching has to bring about a complete transformation in his attitude towards knowledge. He should begin thinking of knowledge as a whole made up of bits from all topics and subjects as it suits requirements. He should teach only those bits that suit the occasion irrespective of the subject to which those bits belong, and leave the synthetic process of the mind to assimilate and arrange according to subjects or branches of study. This is a very difficult thing and an average teacher often finds himself at sea, and no wonder. His logical mind does not allow him to wait for a suitable opportunity for the treatment of a particular topic even though the logical order requires it to be treated immediately. If he wants to teach through a craft or an environment or an activity he must develop the patience and confidence in the natural growth of knowledge. He has not the faith, though he often professes it, that all useful knowledge will come in at the proper time and it is no use stretching it and striving to bring it in. My experience is that this attitude comes only with conviction. The teacher here has to keep before his eye an illiterate but practical villager. There are millions of such villagers who are not literate and who can yet carry on their ordinary transactions in life, can work out problems, can express clearly, may be in a little crude language, can understand and grasp the arguments of others, can appreciate humour and retort if need be, and so on like any other cultured or educated person. Such persons have not gone to schools to learn at our hands. They have learnt through life. If this conviction is well founded there is no reason why the teacher should not wait for proper opportunities in life to impart certain important bits of knowledge.

The craft-centred or activity-centred teaching is psychological and natural in the sense that it provides the child with natural motivation for learning. He sees the need of learning. For this purpose the teacher needs to keep in view different processes of the craft or stages in the activity and should see what can be taught at these stages and in these processes. He should certainly keep his eye on the topics

he wants to teach but the topics will have a secondary position. The process or stage in the craft or activity is the fundamental thing and the teacher should select which of the topics will go well at that particular stage. Craft or activity is in the centre and the topics or bits of information act as the handmaid and enrich the craft or the activity. Though this attitude may appear rather queer to the orthodox mind it is pedagogically the right one in the sense that the child is put on to an activity which interests him and gives him enough scope to move his hands and feet. The creative product of this activity brings him a satisfaction entirely different from the make-believe satisfaction so far achieved and consequently gives him a confidence which is bound to create self-confidence in him.

Keeping these points in view let us now see what stages or processes a child has to learn in spinning and carding, which has been taken as the basic craft in our scheme, and how those stages can be utilized in giving knowledge about different operations in Arithmetic. Before we do this, let us see what operations we want our children to learn usefully. (Here again this attitude of thinking is a little unpsychological but it cannot be helped). We are restricting ourselves to the first three standards only. *Our* commonsense and experience says that children should learn notation and numeration, the four fundamental operations in simple numbers *i.e.* addition, subtraction, multiplication and division of simple numbers, fundamental operation with compound qualities and elementary notions of vulgar fractions. The compound quantities that children should know are in connection with money, weight, length and time. Under each of the four fundamental operations, there are stages such as simple addition, addition involving carrying, addition by twos, threes, fours etc., multiplication tables as addition and so on.

The learning of the above topics can be divided into two divisions: (1) learning of the principle i.e. undertaking the method of doing and writing and (2) drilling the technique so as to make it permanent and readily available. The stages and processes in crafts and activities should provide opportunities for both. As the craft or the activity is to be the medium, we should examine in details the various stages and

just find out how much of the above can be taught naturally at these stages and how both the sides of the learning can be attended to.

Spinning and carding is the main craft we have introduced in our schools and hence let us see what processes the child has to master, and in what order, and then see how much of the so-called important and necessary knowledge can be given to our children.

The processes children have to master are as under: (Only those processes that can be utilized for teaching Arithmetic have been taken here.)

Pre-Spinning activities

Making slivers.
Putting thread on the winders.

Spinning activities

Spinning the yarn.
Putting the yarn on the winder.

Post-spinning activities

Keeping a record of daily yarn.
Keeping a record of daily slivers.
Making gundis and lattis of the yarn.
Record of carding by weight. Waste.
Finding the speed.
Calculation of wages.
Record of yarn by length: Gundis and lattis, yds., feet, and inches etc.
Quantity of cloth that can be woven.

There will be many more stages than those outlined above but these are the most important. It may be argued that the topics mentioned above do not form a part of the craft. Such an argument is quite relevant but no actual spinning or carding operation can be mathematical. Mathematics may be brought in the manufacture of implements and equipment for a craft. The craft itself is based on scientific principles and is the sumtotal of the various relevant applications of science. Thus only the record-keeping part of spinning and carding—and it is the most important part of any productive craft, perhaps more important than craft itself—can be utilized for teaching arithmetic.

Let us now see what can be taught at different stages of the operations mentioned above:

Making slivers.

Putting thread (pucca) on the winders.

Spinning the Takli.

Putting the yarn on the winders.

These can be used very well for teaching numeration and notation. Making the slivers will be an activity which can be given to children in the beginning. The teacher may restrict the quantity of carded cotton according to his requirements. He may start with cotton just sufficient to make one or two slivers. Perhaps children will not find it difficult to grasp numbers up to 3 in the initial stages. The teacher makes children prepare slivers and count them as one, two and or three. Notation may go hand in hand with numeration. To me it appears a great mistake to treat notation and numeration separately. If the two are taught simultaneously "one" will go quite easily with sliver or "two" will go quite easily with slivers and so on. In the second activity, the counting of rounds as and when children put the pucca thread on the winder will give an opportunity for numeration and its record with notation. Thus counting and noting up to 9 will take some time—may be even days. When we come to two-digit figures we can use the winding activity to advantage. Every 10 rounds may be put up in a small group or latti and further counting may go on as 10 and 1=11, 11 and 1=12 or 10 and 1=11; 10 and 2=12, 10 and 3=13 etc. The teacher who has done this work will know how to use this. The same method can be extended for teaching three-digit numbers.

Practice drill in numeration can be given through games connected with the craft. For instance while winding, the class as a whole may take up the activity simultaneously as 1 and 1 is 2, 2 and 1 is 3, 3 and 1 is 4 etc., or 10 and 1 is 11, 10 and 2 is 12, 10 and 3 is 13, or 20 and 1 is 21, 20 and 2 is 22 and so on. A game in takli spinning will also be very interesting. A child comes to the centre of the class and gives a hard twist to the takli and begins counting 1, 2, 3....; other children listen and try to find out mistakes if any. Many such games can be devised. Opportunities in numeration

and notation can be given by getting a stock of slivers and putting them into bundles of 10 and finally into bundles of 100.

The average man does not require to use a number of more than three digits—at least a child is never required to use it in actual life—and so the teacher should be content with notation and numeration of three digits.

Keeping a record of daily yarn and or slivers:

This activity can be utilized for teaching addition. The concrete material that we use in ordinary teaching is there in the form of slivers or rounds of yarn on the winder. The teacher may give short spans i. e. divide a period of 40 minutes into 7 or 8 units, ask children to spin for 5 minutes, wind the yarn on the winder, keep a record of such small numbers and teach addition of small single digit numbers to start with. Suppose a child spins 4, 5 and 4 rounds in 3 units. The total must be found. No difficulty will be presented by adding 4 to 5 but adding 4 to 9, i. e. the third unit of spinning, will introduce the idea of carrying which automatically arises as the child puts his yarn into a latti or 10 as soon as one is added to 9. Two or three such opportunities will give children an understanding of the principle, and then the drill part remains to make the operation of addition more or less mechanical.

The present day practice in ordinary schools is to give children imaginary problems for the drill part. These are not psychologically sound. Here we can make children keep a record of their yarn for 2 or 3 units in each period and add them up. So long as children are in single-unit-number addition, records of yarn in two or three units per period will be suitable. When they go to two digit addition, half period records or full period records may be kept, and after some time daily records may be kept. It is true that under this scheme intensive drill work cannot be given. The drill work in addition will be spread over a month or a year or the school career at the rate of one or two problems per day, but this is more to the advantage of the child. The errors in addition will be more readily eliminated by giving them intensive drill for a short time. This is psychologically and educationally quite true.

Keeping a daily record of slivers:

This activity gives a good scope for teaching addition and subtraction. The child is given five slivers on a particular day; he spins two and three are left. This he can put down in the form of a record;

Slivers given	5
Slivers spun	2
Slivers left	3

If the child has not learnt enough writing, the number of slivers given and spun can be written in different coloured chalk, or a similar device can be found out.

A record form of the type mentioned below will be useful.

Slivers given	5	7	6			
Slivers spun	3	4	5			
Slivers left	2	3	1			
Date	1	2	3	4	etc.	etc.

Such record-keeping may be given for about a week. Later on the following record may be kept:

Slivers left over	0	2	4	7		
Slivers given	7	8	8	6		
Total slivers	7	10	12	13		
Slivers spun	5	6	5	6		
Slivers left	2	4	7	7		
Date	1	2	3	4	etc.	etc.

Such record-keeping will have to be continued for a fairly long time. This means subtraction of single digit numbers involving carrying. For a two-digit number subtraction a similar record may be kept of the number of rounds of yarn spun and how many more rounds are necessary for a gundi or a latti etc. Teachers of training colleges who give a little

thought to this will evolve a number of such devices to be suggested to teachers of basic schools.

Opportunities for teaching multiplication and division can be found by keeping similar records: problems of the quantity of yarn a child can have in a week by spinning....rounds per day; or, if every boy span at the same time and at the same rate, how many rounds of yarn will be produced in a day by a class. Problems of a similar kind can be multiplied. Similarly problems on calculation of speed will give opportunity for division by two or three according to the periods or unit-periods taken by the teacher per day. In the same way record keeping in gundis and lattis or by weight or by length will give the teacher enough opportunities of teaching compound quantities and the four fundamental operations. The calculation of waste will be a good opportunity for teaching subtraction of compound quantities.

Problems on money and quantity of cloth produced from a quantity of yarn will have to be taken later on. Such problems will give opportunities in multiplication and division of compound quantities. A child cards ... tolas per day: in a week he cards ... tolas: such problems in multiplication can be multiplied. Similarly problems on division can be had in the actual class-room.

Personal records can be kept by every child as under: A child requires ... yards of cloth: he should spin ... lattis and gundis in all. (The teacher gives this information.) Now he can keep a day to day record of it:

	Lattis	Gundis
Quantity required to be spun	..	..
Spun on the day	..	..
Quantity still to be spun	..	..
Dates or weeks	1	:2:

Or while talking of the cloth: every boy requires for his uniform ... yards of cloth. There are ... boys in the class. Therefore ... yards of cloth will be required. Now a record to find out how many days will be necessary for spinning the required yarn, the number of hours to be worked for it and so on. There may be personal records, class records, school records. The arithmetic teaching will thus be based on

keeping records and calculating cost. This record-keeping need not be the same as or identical with the teacher's ordinary record keeping of the economic aspect of our scheme. That may be made use of if convenient but should not necessarily be identical.

The above is an outline of arithmetic teaching for three standards correlated with the craft of spinning.

Two warnings I must give to the teachers.

1. Remember that arithmetic teaching correlated with spinning is not the only arithmetic children are to learn. There are other activities in the school and what does not come under spinning will probably come under excursions, nature study work, social studies etc. All important things will come in if you make children live in those activities. If certain things do not come, do not worry, however important you may consider them from your point of view. Rest assured that your judgment is wrong; either the time is not ripe for teaching these things or the topics are not important at all. If the time is not ripe, wait; forget the utility if it is not important.

2. Do not make a fetish of the method and the subject matter. Use the method that a child can grasp and stick to it. Do not bring in subject matter that does not fit in with the stage in the craft.

My experience of the teachers in the training schools and in basic schools has been that they are too keen on subject matter and drag craft into the teaching. They give imaginary problems about craft and try to show it as correlated teaching. Let me tell them that it is craft-biassed teaching and not craft-centred. Distinguish between the two—a bias and a centre. In the former the problems are drawn from craft. These are imaginary and do not form a part of the craft. If problems are to be taught through a craft then they should evolve from it, in relation to it and in relation to the satisfaction of the child for it (craft). The record keeping suggested above evolves from the craft, is in relation to the craft and does make a child inquisitive about his own requirements in relation to the craft that he is learning.

The correlated teaching of the Mother Tongue with spinning as the basic craft.

By Acharya Bhagvat, Saswad.

Many educationists are still honestly sceptical about the possibility of giving a child a complete all-round education through a handicraft round which the whole education must centre, in accordance with the scheme of basic education. Doubts and difficulties may be felt regarding the teaching of other subjects, but we have no grounds for doubt so far as the teaching of language is concerned.

Language grew out of a need felt by man in the activities motivated by his daily struggle with nature for existence. Some psycho-analysts have suggested that language owes its origin to the sex instinct of man, but since the instinct of self-preservation with all the attendant activities is primary to the sex instinct, it seems more natural and psychological to suppose that language was created to fulfil a need originating in man's battle with nature for his own preservation.

It is certain that language was evolved to supply a need arising from man's life activities. Our ancient philologists (Niruktakaras) also say that all words have their origin in verbs. This ancient theory is supported by observing how the child acquires his vocabulary through his own activities or through imitating the activities of others. A dog is a "bow-bow", a cat is a "miow-miow", a cow a "moo-cow" and a car a "honk-honk". While speaking to a child we adults adopt his vocabulary and his method of learning.

Unfortunately, as soon as the child of six or seven comes to school to learn a language, we immediately forget this natural and psychological process. We do not attempt to increase his vocabulary by increasing his activities. The whole emphasis of present-day education is on literacy. The natural consequence is that the child's mastery of language remains incomplete and ineffective.

The Wardha Scheme of Education is a revolt against this artificial method of teaching a child its own mother-tongue. It emphasizes two fundamental educational principles in the teaching of the mother-tongue: firstly, that since language has

grown from and developed with the growth and development of human activities, the natural method for a child to learn a language is through a growing familiarity with, and mastery over, natural and suitable activities; secondly, when we entangle a child in the intricacies of an alphabet before he has learnt to express himself fully and freely, we cripple for ever his ability to learn a language.

As a rule a child can learn to express himself in a language through the intelligent pursuit if any suitable handicraft. A handicraft forms the natural meeting-point of the child's physical and social environment, and thus the craft medium introduces him to all the facts, phenomena and processes which he needs to know.

Let us take as an instance the craft of spinning and see how far the child can acquire through this craft all the necessary knowledge of language. Food and clothing are the two fundamental human necessities; the history of human civilization is the story of the evolution of man's attempt to fulfil these two fundamental human necessities.

Let us begin with the sowing of cotton seeds. There are many varieties of cotton, and specimens of each variety may be sown in the school garden. The child's education thus begins with the preparation of the ground for sowing cotton. While sowing and planting cotton, he gains a practical knowledge of soil, air, water, day and night and the different seasons; he also becomes familiar with the processes of ploughing, manuring, sowing, watching the crops and harvesting. With the growth of the cotton plant he learns to recognize the root, the stem, the leaves and the pod, their shape, colour, texture, smell and touch, and their similarity with and difference from other similar and dissimilar objects. The child's vocabulary and powers of self-expression cannot fail to be enriched by the story of how, before he discovered the use of cotton, primitive man attempted to clothe himself with skins, bark etc., and the story of the cultural and ethical effects of the discovery of cotton—the consequent cleanliness of person and of clothes and the decrease in the slaughter of animals.

The processes of ginning, carding, spinning and weaving will follow after the cultivation of cotton and the processes

of dyeing, printing and tailoring will complete the story of cloth.

The processes of ginning, carding, spinning and weaving will include an acquaintance with the subsidiary crafts of carpentry and smithy, and an elementary knowledge of mechanics; this gradual expansion of their knowledge will enrich and deepen their knowledge of language.

Today the scope of language work is limited to poetry, stories, dramas, literature and grammar, and many teachers are perplexed as to how language can be taught through a handicraft. They forget that all the business of life is carried on through language. Language is thus primarily a record of human activities.

The field covered by spinning as medium of education is a very wide one. It includes a knowledge of varieties of types of clothing, of the fashions of clothing in different countries and different ages, of the place of cloth in world economy and particularly of the part played by cloth in the political and economic history of India. Education through spinning certainly offers sufficient facilities for the teaching of language, and the story of the evolution of cloth is interesting enough to be translated into literature.

Ordinarily the teaching of language means the teaching of reading and writing. The real purpose of teaching language to a child is to help him to define and express all the activities of life through beautiful and accurate speech, but reading and writing have their own place in language teaching. The scheme of basic education however emphasizes the development of the child's powers of self-expression before he is introduced to the alphabet. Encourage him to talk, to describe his experiences freely, fully and correctly. When he has attained a certain degree of self-confidence in oral self-expression, he can be introduced to the letters and later to writing.

The child's first reading material can and should be built round his first year's experience of the selected basic craft. A very good primer can be prepared round spinning with the takli and the corollary processes. The very first lessons with the takli will teach the correct use of about seventyfive words, e.g., nouns such as takli, winder, rod, disc, carding bow, gut,

striker, plank, handle, mat, balance, weight, kali (16 rounds), latti (a hank of 160 rounds), gundi (a hank of 640 rounds), hands, feet, wastage, addition, subtraction, silence, speed, yarn, string, thread, iron, brass, wood, leather, seer, chatak, tola, pounds, cotton-seed, cotton-pod, flowers, leaves etc; verbs such as to gin, to card, to spin, to revolve, to wind, to clean, to sow, to pick, to break, to join, to weigh etc.; adjectives such as left, right, black, yellow, white, clean, dirty etc. This list can be added to from experience by every teacher of basic education.

All the reading material can be built out of this vocabulary with stories, myths, legends, historical tales, folk tales, folk songs, national songs and lessons or stories about citizenship, health and hygiene, correct diet etc. Not only this material, but much more, can be woven round the nucleus of the takli and the charkha.

Grammar also can be more effectively taught during the processes and through the accessories of the basic craft of spinning. It is easier to teach the function of nouns, adjectives and verbs by similarity during the actual process of craft work. Children should learn to recognize pronouns and adverbs by practical use. It is a mistake to think that grammar is a matter of language only. Grammar is an analysis of language and language is based on living experience. Grammar is therefore only a scientific analysis of living experience. In schools today the children are never shown the connection between their living experience and grammar, and the latter is always a dry and uninteresting subject. If the children could only understand the close relationship between life and grammar it could be transformed into a most fascinating study.

Language is after all a creation of man—an arrangement of symbols of human experience. The symbol (whether the spoken or the written word) can never take the place of the actual living experience it represents. This difference must be made clear to the children from the very beginning. For, when life is divorced from experience and revolves round words and symbols, we lose touch with reality and begin to live in an artificial and imaginary world. The literature we create is tainted with untruth, weakness and obscurity. This

literature saps all the strength from men and women. But a society that through its own efforts remains actively in touch with actual life can never descend to such a pass. The social mind which will grow with the spread of the scheme of basic education will never allow language to lose touch with reality. The literature it creates will be filled with the joy of life, and will inspire humanity to push forward towards the attainment of the ideal quest.

Correlated teaching of General Science with Spinning as the Basic Craft.

By Sjt. M. T. Bombawala, District Inspector of Schools, Wardha, C. P.

I should have felt diffident to stand before such a gathering of eminent educationists, but I believe my experience in the introduction of basic education will be found interesting if not instructive. Our province, I come from the Central Provinces and Berar, happens to be the first in this field and we have been working with this syllabus for the last eighteen months. I would make particular mention of the difficulties encountered, so that in this assembly we may be able to find the best solution. Since the president has already dealt, ably and lucidly, with the general aspect of correlation I shall therefore confine myself mostly to details.

Now before anything can be correlated to anything else, it is necessary that the same person should have a knowledge of both the things. The deeper the knowledge the better the correlation. Our first difficulty was to find a suitable teacher —or shall I call him professor—for our training schools. In these days when graduates and double graduates are available for a piece of bread and a song this difficulty may appear trivial. It is quite true that we do get very highly qualified men on moderate salaries for this work. But the more highly qualified the man is the less suitable he proves as a teacher of general science. The fault lies in the present system of education, with its excessive stress on specialization and division of knowledge into water-tight compartments. A teacher qualified in physics and chemistry knows nothing of zoology and botany or of physiology or physical culture. Probably it will be very difficult to find anyone with the

requisite knowledge of astronomy, it is one of the subjects very much neglected by our universities. But life does not come to us in water-tight compartments. The general science syllabus represents an organic development of the child's environment. It includes plants, insects, stars as well as inorganic matter. If these are to be studied scientifically the teacher must have the requisite knowledge about them all.

It is therefore futile to look for a ready-made teacher; one has to be made. An intelligent young man, with a scientific training, who is not too old to learn new things, including the craft, must be selected. He should be given the necessary facilities, particularly leisure and a library, to study his subject. The Nalwadi Ashram at Wardha undertakes to give full training in the basic craft of spinning in six months. I believe that at the same time it should be possible for our young man to acquire the necessary knowledge of his subject of general science.

Having acquired the knowledge and the craft, the next thing is correlation. Correlation in actual practice is not so difficult as it appears at a distance, but it requires a thorough knowledge of the subject. In the old system it was easy for a teacher to hide his ignorance from his pupils and from his examiners. Whatever was not understood, was committed to memory from the text book and was reproduced when required. Such a practice is not possible in the new system. Take the phases of the moon for example. If this is to be correlated to the child's natural environment the teacher must show the children the moon on different nights and explain to them scientifically what they actually see. There are to be no hypothetical observations and hypothetical explanations such as are given in the text books. It is obvious that such a method of teaching requires a greater insight into the subject than the old one. Similarly in correlation with craft we might take the example of humidity. Its effect on the carded cotton and slivers may not be known to many scientists. The effect of wind on spinning and carding, the damage caused by some insects to the cotton as it grows on the plant, the actual cotton plant itself, all these can and should form subjects of scientific investigation and will prove very useful means of education in correlation with the craft.

To the teacher who already knows his subject it will afford an opportunity to apply his knowledge to new problems. In the training of teachers at Wardha, efforts were made to impart the knowledge of the syllabus through the craft. Some doubts were raised as to the suitability of this method for grown-ups who already knew most of the subject matter. The matter was referred to Mahatmaji; and this is what he says, "To the boy it is all new: for the seventy years old father it is all repetition, but he will have his old knowledge in a new setting."* This new setting is necessary if the teacher is to make a success of correlation.

Though all are agreed that correlation is very good and should be tried as far as possible, nobody seems to know exactly how far it is possible. Some honestly doubt whether it will go very far and cover all the subject matter in the curriculum, without becoming artificial. It is too early to make any definite statement on this point as we have not had sufficient experience. We have introduced basic education in class I in 58 schools in the Wardha districts, and the difficulties of the teachers working in these schools give us plenty of material for thought; (though I am sorry to say that due to circumstances beyond my control our thoughts do not always form the basis of actions of the teachers.) However, we have been thinking and it can now be said that most of the general science syllabus can be correlated in a natural manner with the basic craft of spinning. Owing to the shortage of time at my disposal it is not possible to give all the details, but I believe that if they are published from time to time, such details will be very helpful to teachers and will enable us to discover the best method of correlation. In this connection I would invite the attention of all to the article on correlation by Acharya Vinobaji in the October issue of Nai Talim.

The time-table given on page 40 of Basic National Education sets apart 30 minutes each day for social studies and general science. This time is frequently utilized by the teachers and the pupils for excursions and study of their social as well as their natural environment. As has already been said the curriculum in general science has been evolved

*(Harijan dated 6-2-'39.)

out of the natural environment of the child; all the knowledge can be correlated with the environment. It is further noticed that teachers find it easier to correlate with the natural environment. The reason is that they have not had their knowledge in the "Craft setting".

Lastly I would make mention of the difference in the treatment of the subject which appears to be necessary if the correlation is to be successful. In the old system the portion was covered in parts and the pupils "consolidated" these parts by committing them to memory from text books or notes. If the lessons were taught once at the beginning of the session they were not taught again. In the basic system season will be taught at least thrice, first in connection with the growing of cotton, second in connection with the change of clothing and third in connection with the festival of Vasant Panchami. Each time the knowledge given will not be a mere repetition but it will be made richer in content and detail. The pupil will be able to assimilate it without recourse to books. This would, I think, conform to the configuration theory of the psychologist.

Well, Ladies and Gentlemen, the bell has already rung; I thank you for the patient hearing and would request you to send in your suggestions for improvement in the work of which I have just given you an outline.

Cardboard, Wood and Metal Work

By Sjt. Lakshmishwar Sinha, Craft Superintendent, Vidya Mandir Training Institute, Wardha, C. P.

I have been asked to speak on the basic craft of cardboard, wood and metal work. As laid down in the Report of the Zakir Husain Committee, a basic craft must fulfil two conditions—educational and economic. It must be rich in educational possibilities, finding natural points of correlation with important human activities and interests, and it should extend into the whole content of the school curriculum. It must also be a productive craft in the real sense of the word: it must have its own place in the scheme of national economy.

The craft of cardboard-modelling has been fully dealt with in the handbook for teachers just published. That book indicates how cardboard-modelling can be used profitably as a

medium of education for recognized school subjects, and for the training of young children in habits of co-operative disciplined activity—a training which forms an indispensable part of the new scheme of education.

I wish now to discuss the crafts of wood and metal work, dealing only with their educational aspect. Productive and scientific wood-work will impart in the pupils on the one hand an impetus to organize their lives in a natural way, and on the other hand a knowledge of arithmetic, geometry, physics etc.

The introduction of wood-work will train the pupils' senses and will prepare them to deal with the harder material, metal. From ancient times, wood has constituted an important material from which primitive people fashioned their implements before the discovery of metal. Even today it is being increasingly used, for it covers a wide field of individual and social needs.

The introduction of wood-work will equip the pupils with an elementary knowledge of local trees and their uses. As they learn the nature of wood while handling it, they will come to understand the effect of natural forces on the growing tree. They will also learn to attach a proper value to isolated plants and to forests, which are frequently neglected and destroyed owing to ignorance. They will come to recognize the different specimens of Indian wood and so to know something of the geography of wood in India. Hence they will proceed to a knowledge of the people of different provinces—people in the various branches of wood-work, their modes of living and social customs. Next will come the physical geography of the country, the effect of rivers and climate on forest growths. The story of the invention of simple tools for wood-work will stimulate curiosity as to the lives of the people who invented them.

Thus, if wood-work is taught scientifically through making objects of utility, it fulfils the conditions for a basic craft laid down in the Zakir Husain Report.

To proceed to metal-work which will be introduced in grades VI and VII. This craft has its own traditions in the annals of human culture. The story of the manufacture of tools and other objects made of metal, from early times until

the present day, covers a wide field of the knowledge of human civilization, for it requires a great deal of ingenuity to make a tool or implement which shall be both simple and useful.

Let us examine the general educational value of the craft.

It will give the pupils an elementary knowledge of working with materials which are harder than wood. It will equip the pupils with an elementary knowledge of the metal resources of the country and the role which they occupy in the national economy. Metal-work demands a certain knowledge of general science and elementary physics which the pupils will acquire while making concrete objects of utility—an important educational factor. Through this craft, the pupils' knowledge of mathematics will become concrete and so useful, and the pupils will be better equipped for higher studies in technical lines.

Moreover, work with metal demands a precision and accuracy which must have their influence on the building of character and the development of habits of methodical thinking. It will supply our crudest needs in the form of implements and appliances for the farm, the workshop and the household, and simple implements required in the prosecution of other crafts. Since this is an agricultural country, the introduction of metal-work will effect great economy and efficiency in all our crafts. The aesthetic value of hand-made instruments in preference to machine-made products must not be overlooked. To sum up, great potential factors, both educative and economic, are implicit in the introduction of these two basic crafts, and their introduction will moreover facilitate the development of other crafts which are at present handicapped on account of inefficiency of tools and implements.

Next we must consider the technique of correlation which must always follow the actual process of living. Firstly we must bear in mind that a few generations ago, crafts were centred in the village and many a simple village craft connected with the day-to-day life of the people was performed within the home. From an early age children helped in the

work of these home crafts and thus had opportunities for the observation of the work in all its stages—the process, materials and implements. Even today, village children are expected to help in the few surviving village crafts. But the village life of the past is dead, and the crafts have degenerated with it. I therefore maintain that if we wish our villages to become once more living and pulsating, we have to begin our education with the actual necessities of life. No abstract object lessons can acquaint us with the actual business of life and of living. The importance of correlation of such subjects as the mother-tongue, general science, social studies etc., with constructive crafts can be grasped fully only if we grasp the implications of craft work in its natural, organized and scientific aspects.

Correlation itself depends very much on a comprehensive view of local demands and necessities and on the nature of the objects to be executed. The common principles for the evolution of a model series are dealt with in Chapter IV of the handbook on cardboard-modelling.*

"It must be borne in mind that all correlative phenomena are interconnected. When the child has gained one piece of knowledge through actual experience or correlation, he is better able to discover other similar phenomena; it is an accumulative process. The child cannot conceive an abstract idea without concrete support. The correlative links in the work are many and can never be complete; the teacher must use his discretion and consider their relative importance, bearing in mind the age, health and environment of the children."

We must always remember that the society has founded the school to rear and educate its children. Therefore school activities and school life must form the main basis for the social studies which the children are expected to assimilate from actual experience and should therefore coincide and reflect the ideal social conditions which alone can give the children a true sense of citizenship and encourage the enjoyment of co-operative activities.

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* Page 27 Para. 3 (1st edition.)

Agriculture in the Basic Syllabus

By S. R. Bhise, Bordi.

The syllabus is divided into three different parts: the first part deals with the work to be done in the first five standards, the second deals with the work in the sixth and seventh standards, and the third deals with the work to be done in training institutions. In the first and the second parts the subject is more educative than informational, while in the third part, it is both informational and educative. As far as I know, very little attention is being paid to the organization and planning of the syllabus included in the third part, namely the training of teachers. Especially in this subject, agriculture, we have very few teachers properly equipped to help children in their education. I would therefore request authorities concerned in the organization of training centres in the province of Bombay particularly, to organize facilities for the systematic training of teachers in agriculture. These facilities include preparation of literature, and organization of gardens, farms, museums, etc. This will become more necessary when the Wardha plan is extended to the higher standards of the basic schools, where agriculture is given the place of a basic craft.

I think it is necessary for the administrators to sit together, and draw up a plan for the clear and systematic introduction of agriculture or wood-work as basic crafts in training institutions along with spinning. I know that there are bound to be some difficulties, but since the principle of some alternative basic crafts other than spinning has been accepted, and since provision has been made for training in these other crafts, the administrators must organize the work in the training institutions as early as possible, so that when the time comes for the introduction of agriculture or wood-work as a basic craft in the basic schools, the teachers may have a clear and complete idea as to how to execute the programme.

I should like to place before the workers a probable difficulty in this respect.

Agriculture forms a part of the general science scheme in the first five standards; but in the two higher standards it

has been given the status of a basic craft in some schools. In those schools where agriculture may be taken up as a basic craft in the higher standards, the teaching in other subjects in those standards will have to be correlated to basic craft of agriculture, whereas in the same schools, the teaching in the first five standards will have been correlated to spinning. Will this not create difficulties in organizing and planning, and also in the details of the day-to-day work? I hope to be enlightened on this point by people who may have thought about it.

I have no desire to carry on a propaganda in favour of agriculture being taken as a basic craft uniformly in all the standards of the basic schools, but I opine that either we shall have to relegate agriculture in the two higher standards to the position of the other subjects of the curriculum, or else we shall have to adopt agriculture as a basic craft uniformly in all the standards.

Taking advantage of this occasion, I would try to point out, if it is necessary to do so, that agriculture has all the qualifications of a basic craft. When I pass that remark I am thoroughly conscious of the inherent limitations of that subject also. In the first place, agriculture may not be regarded as a craft. It covers the whole of life, and not a part of it as craft does. Unlike craft work, in agriculture there is very little scope for the acquisition of hand-skill, the effect of laborious, persistent, intelligent work. Moreover, at many places, successful operations in agriculture depend on climatic and soil conditions; and the initial cost of organizing a school with agriculture as a basic craft is comparatively heavy. But in spite of all these disadvantages and limitations of agriculture, it must be pointed out that it has many other points in its favour, and it satisfies the fundamental conception of a basic craft or occupation. I take the liberty to point out below how agriculture satisfies the fundamental conception of a basic craft or occupation.

Agriculture is the occupation of life. It is the occupation of nearly 80% of the people.

It is in contact with life at every point and brings us in direct and living contact with other different types of life, plant, insect, bird, animal etc.

It brings the school in direct and sympathetic contact with the village community.

It affords scope for the simultaneous development of head, heart and body by observation, examination, experiment and actual work.

By co-operative activities it affords splendid opportunities for the development of a civic sense and minimizes the dangers of competition organized with a team spirit. It develops skill in planning, execution and discipline.

Around the basic craft of agriculture the village life could very well be organized by planning interesting functions, educationally called projects, major and minor, such as a cattle day, a tree planting day, a Dashara or a Navaratra day and many others.

This occupation removes the ennui of sedentary work and affords plenty of healthy recreation.

It responds naturally to children's instincts of growing and collecting.

Through agriculture, education can definitely be made self-supporting without external resources and help and the school can begin to repay some of the initial cost.

The Zakir Husain Committee calculates that a school with 20 acres of land under systematic cultivation can gain a net income of Rs. 1,000 from agricultural produce. It should be remembered that the expenditure shown in the report covers all possible items, including extra labour. Now as agriculture is a basic craft in the last two standards, the salary item would include only two teachers whose annual salary would be Rs. 720 approximately. Thus the net income of Rs. 1,000 from the farm maintained with pupils' labour, with extra labour wherever necessary, would completely cover the salary of the teachers, and leave a comfortable margin for other school expenses, initial or recurring. This balance might very well be utilized to pay off the advances made by Government for the initial expenditure.

Thus if basic agricultural schools are started wherever the agricultural conditions are satisfactory the knotty question of self-supporting education will be solved without much difficulty; and further, the questions of the sale of produce

and of unemployment will not arise because the produce can easily be sold.

The figures of income and expenditure given in the Zakir Husain Committee Report can be verified by the actual experience of intelligent and industrious farmers in favourable localities, but I am inclined to think that the calculations given there are very modest. I have in my possession figures taken from Bombay Government crop reports which show that the net income from 20 acres of land in favourable circumstances would be much more than that shown in the Zakir Husain Committee Report.

Now let us see how the instruction in other subjects can be correlated to agriculture.

The theoretical part of the study of agriculture would be divided into the following parts:

1. Soil study.
2. Crop study.
3. Crop values.
4. Man and animals.
5. Expression.

While dealing with soil study, pupils would learn chemistry, physics and geology. Soil study is the knowledge of different types of soil, how they are formed, and how they could be improved. This study is closely related to the study of physics, chemistry and geology. Under the second division—crop-study—pupils would learn the preparation and function of different kinds of manures, which is nothing but chemistry. They would also study different kinds of gases affecting plant life, and the properties and functions of salts and acids. This is also chemistry. In crop study, pupils would learn the connection of heat with rainfall and the growth of plants, of light with the life and growth of plants and animals, and of sound with the phenomenon of lightning. They would come to understand everyday experiences, such as the working of pumps and engines by steam. In mechanics they would study the technique of the plough, the wheel, the pulley, etc.

The third part of agricultural study is crop values. This will be related to social studies, mathematics, history, geography, and also subsidiary occupations. Here we shall trace

the development of agricultural industry and the decay of cottage industries from the time when the Europeans came to this country in search of raw materials and agricultural commodities; we shall also find that present day Indian nationalism is increasingly an agrarian movement, and that many of our customs and festivities are closely connected with agricultural pursuits.

Under the study of man and animals, we shall include an elementary study of hygiene, first aid, medicine, sanitation and dietetics.

Lastly under the expressional branch of agricultural study we shall include the study of languages, drawing, painting, dancing and theatricals. Agricultural life is immensely rich in the facilities it provides for the fullest development of the expressional side of education and the manifestation of the aesthetic side of life.

Thus it will be clearly seen that under the basic education plan correlation of all the courses of study with the basic craft of agriculture is easy, natural and logical.

May I request some of the administrators in charge of basic education to try to organize a training centre with agriculture as the basic craft?

A Few Practical Problems in Correlation—the experiment in the basic school at Rajpipla

By Gopal Rao Kulkarni.

I stand here before you not as an exponent, but as a student of basic education. For the last four months I have been trying to conduct a small experiment in basic education in the primary school at Rajpipla. I am not a trained teacher of basic education. My only qualification for this task is that of faith. I believe in what I have understood to be the fundamental principle of basic education—that a complete and all-round education can be given to a child through some form of handicraft or productive activity and not through words or speech as was formerly supposed. With this faith as my inspiration, and the training in spinning I had received as a student of Kakasaheb, on 17th June 1939, I started the experiment with the first two grades of the school at Rajpipla with

spinning as the basic craft. The first term closed on October '39. This short report that I place before you is the result of the experiment of four months. The experiment of basic education centres round the problem of correlating all branches of knowledge to the nucleus of a basic craft. The success of the experiment is therefore to be measured by the spontaniety and effectiveness of this fundamental process of correlation. I shall therefore only try to indicate very briefly how we have tried to correlate the different subjects to the basic craft of spinning. From the very beginning, we have experienced no difficulty in correlating mathematics with the basic craft. We have put up some charts in the exhibition recording our experiments in this direction. It will suffice to say here that we have been working on lines similar to those indicated by Sjt. L. R. Desai in his paper on the "Correlated Teaching of Mathematics."

Whatever difficulties we have experienced have been in correlating social studies and general science with the basic draft. The problem of language teaching belongs to a different category, for language work can be and should be correlated not only with the basic craft but with the teaching of social studies and general science.

As regards correlation of social studies with the basic craft, we begin with the story of clothes. We intiated the topic with the question, "Why do we human beings wear clothes?" The question led to the description of different material such as cotton, wool, and silk used by human beings to clothe themselves, and gradually the story of the primitive men, clothed in grass, bark or skins. This centre radiated into many interesting stories and activities. The story of Ram and Lakshman who went to the forest in bark dress (Balkal)—the story of Eskimos in the frozen areas, the story of the Chinese queen who first discovered the silk-worm and spread the knowledge of silk in China. This led to the story of the great Chinese civilization and Chinese children, the story of the cold countries where wool was spun and woven for wearing. To illustrate our stories we prepared a few pictures which you may see in the exhibition, and took the children for an excursion to see the Bhils in the neighbouring area.

The stories were next dramatized and the children, dressed as Eskimos, Chinese, Papuans etc., acted their parts to their great delight, and it is to be hoped that they will retain some impression, however dim, of the stories.

We next took up the celebration of Gandhi Jayanti as a centre of correlation. It is not necessary to mention here the close relationship between spinning and Gandhi Jayanti. The programme lasted about 20 days, each boy carded and spun 8 or 9 tolas of cotton and contributed it to the Sutrayagna. During this period, while telling the story of Gandhiji's life, we introduced the children to the problems of the poverty of India, Charkha versus mill, famine and distress of Indian peasants, the significance of village industries and the relationship of the British with India. The boys took great interest in all these topics.

I have placed before you the attempts we have made in correlating the teaching of social studies round the two centres of the story of cloth and the celebration of Gandhi Jayanti. You can see for yourselves that we have been able to cover a certain part of the syllabus of social studies through these two centres of correlation.

Next comes the problem of the correlation of general science. General science is certainly related to the craft of spinning, but it is much more closely related to the physical environment of the child. We did not therefore insist on correlating every aspect of general science with spinning, but tried to do it only where it was natural and spontaneous. The dirty clothes of the children gave us an opportunity for introducing the topic of clean and pure khadi to the children; this led to the subject of personal hygiene. When the children were tired after spinning or carding or preparing slivers, it gave us an opportunity of introducing physiology through the topic of their fatigue. The different parts of the takli were a good starting point for a knowledge of the different metals, and the different parts of the charkha and their working for wood and a few fundamental principles of motion and friction, leading to the working of pulleys. A knowledge of the different seasons was initiated through the observation that better yarn was spun during the rains, and also from another angle—the difference in clothing in different seasons. We

have thus tried to make use of every possibility of correlating general science to the basic craft of spinning. A full description will be found in the charts on general science in the exhibition.

These are the main lines on which we have tried to work out schemes of correlated studies in the basic school at Rajpipla. It is possible that in many cases the correlation has been forced or far-fetched, but as far as possible we have tried to avoid forced or artificial correlations. This is the reason why we have not been able to introduce a knowledge of the stars or of chemistry. We have not touched upon those branches of general science whose relationship to the craft of spinning has not been clear to us.

As a result of my four months' experience I have come to the conclusion that true correlation can only be with life. All branches of knowledge which should form a child's equipment for life may not be directly related to the craft of spinning, but they will certainly be related to life. After all, spinning or any other similar handicraft has been evolved to meet the necessities of life. I do not believe that cleanliness of the teeth has to be taught through the medium of spinning or that when a child suffers from stomach-ache as a result of indigestion, it is necessary to drag in spinning to teach the child elementary rules of physiology and hygiene.

Our guiding principle in this scheme of education is that some form of handicraft or productive work should be used as the medium of education. The purpose of weaving all knowledge round this basic craft is to make the process of education simple and natural. When this purpose is defeated the particular fact or piece of information should be left for the moment, to be correlated later when a natural occasion arises in the child's actual experience of life.

We should work on this educational principle that wherever the relationship is directly with life, correlation too should be with life. This principle was also emphasized by Kakasaheb in his talk this afternoon.

I have not yet understood how music is to be correlated to spinning, for I do not believe that teaching a song about the charkha or the takli is teaching music through spinning. There are of course ample possibilities of correlating drawing with

spinning, through the drawing of the leaves and flowers of the cotton-plant and the cotton pod, and also pictures of the charkha and the takli. The teaching of drawing can also be co-ordinated with the teaching of general science by acquainting the children with different colours through the observation of leaves, fruits and flowers.

I have only one more aspect of the problem to place before you. Just as we are trying, through this experiment, to correlate all branches of knowledge to the basic craft of spinning, similarly we should try to co-ordinate the different subjects of the syllabus with one another. One is just as essential to the scheme of basic education as the other.

I have already tried to indicate above the possibilities of the co-ordination of mother-tongue with other subjects of the syllabus. Similarly, drawing can be co-ordinated with other subjects. We may use two distinct technical terms for these two processes. (अनुबन्ध) Anubandha or correlation for the technique of relating all branches of knowledge to the basic craft, and (समन्वय) Samanvaya or co-ordination for the process of relating all branches of knowledge to another. Just as the father of the child may be related to all the other fathers through the relationship of friendship, similarly all branches of knowledge having their common origin in a basic craft may be intimately related to one another. Such a close interrelation is essential for the success of basic education.

Friends and co-workers, I have placed my experiences and suggestions before the Conference. I hope that you will do me the kindness to correct my mistakes and show me a way to the solution of my difficulties for the future guidance of my work.

Fallacy of Correlation

Sri Bharatananda spoke on what he called "The Fallacy of Correlation." In the course of his speech he said:

"I want to put before you another point of view, which will appear extreme, but that is because it needs to be put against another extreme. I was struck from the very beginning by the similarity of the Wardha scheme with the project method. Actually the Wardha scheme is only the project method on a life size, dealing not with toys and imaginary

problems, but with realities of daily life. For instance, in the Wardha scheme children work on a real dairy with real cows, not with toys. But apart from this, there is very little difference between the Wardha scheme and the project method. The project method is based mainly on pursuing a certain project, a certain activity for at least a few days, if not a few weeks or months, and carrying on the work of giving the children instruction as and when the project needs it. Imagine the children running a shop, and doing all the weighing, measuring, counting, etc. All these are carried on not because they have to be taught arithmetic or reading and writing, but because the shop needs the weighing, the measuring and the counting. The speakers here talked under two kinds of, what I consider, misimpression. The first misimpression is that the Wardha scheme is an addition to the existing curriculum, the craft something to replace the manual work. This misimpression was dispersed in the very beginning. The second misimpression, which has not yet been dispersed, is that we have a craft on the one side and reading, writing, arithmetic, mother-tongue, history, geography, astronomy, natural science, all kinds of things on the other side, and somehow we must teach all this long list of subjects by some trick, the putting it into the craft being such a trick. It seems as if everybody remembers well that he has got a dozen subjects to teach the child and is just looking for some acrobatic method of doing the trick, of teaching it through the craft. When I listened to the speech on teaching general science through spinning, I thought, "why does he worry about teaching general science through spinning? The main thing is the spinning, and not general science through spinning." The main thing is the spinning; the main thing is the agriculture while you are taking agriculture as the craft; so is smithy, carpentry, gardening, bee-keeping, weaving, dyeing, printing, box-making, tool-making. The craft is the main thing. But while teaching the craft, if the teacher's brain is awake, if he is a complete man, not only a crapenter or a smith, then he will give the children a lot of things which will turn them also into complete men and women. In other words, I think we shall understand the Wardha scheme much better if we forget the long list of

subjects we have to teach the children and we concentrate on the craft and not on the subjects. We are trying to keep the new scheme within the framework of the old scheme. We forget that the new scheme is completely revolutionary, as stated by Gandhiji in his message yesterday. Literacy is not education; reading and writing is not education; knowledge of physics and mathematics is not education; knowledge of anatomy, botany, history, geography is not education. What is education? The purpose of education is to make the children into men and women who are self-reliant, who can support themselves and their families, who have got and know their place in society. Everything else is secondary. Therefore, the correlation idea is a fallacy.

Now you will ask me: How are we going to teach? What are we going to teach? The first thing is to come back to the root. The root is the teacher. If the teacher knows his job, knows his craft, and has got a wide field of knowledge relating to his craft, then, as and when he goes on with his work with the children, he explains to them the whys and hows of every process, and the less his brain is worried about the subject he has got to teach the children the more efficient he will be in the Wardha scheme of education. In other words, every teacher is an encyclopaedia of the knowledge relating to the craft he teaches the children. That knowledge will vary from village to village. In some villages, a certain set of knowledge is not at all necessary; in some villages a very specialized knowledge may be required. In a village where sheep breeding is the profession, the anatomy, physiology and pathology of sheep must be gone into deeply, because the very life of the village depends on it. In other villages it will be absolutely unnecessary. What we need to teach the children is a craft, and we must give them all the necessary information to develop their mental alertness and to give them a certain amount of encyclopaedic knowledge of the craft, related to their life and to the surroundings in which they are living.

I would suggest, as a practical implementing of what I have said, that every school should collect questions and answers relating to the particular craft of the village in which the school is located. In other words, children should be

encouraged to put questions, should be encouraged to collect answers, and these questions and answers should be tabulated, so that a whole body of knowledge could be built up. That will survive for future years for succeeding generations of life to refer to. That body of knowledge will be useful from generation to generation and the children must be taught to look up the records and not depend only upon the teacher for information."

Sjt. Trivedi enquired what Sri Bharatananda meant by the word "correlation."

Sri Bharatananda said that he meant by it the background of instruction which they had to impart. When they went with a blank mind, there was no need of correlation, because they would not expect that they had to impart certain instruction to the children. But when they went to the school with the idea that they had to teach subjects then the need of correlation would arise. But the basic scheme wanted to give complete freedom to the teacher. The basic scheme says: "Teach them a craft and anything you think necessary for and through that craft." He did not see in the basic scheme teaching of subjects on one side and the craft on the other side. He saw only the craft and everything the teacher thought useful or necessary, or even amusing, for and through that craft. The teacher would not go with a body of systematized knowledge trying to squeeze into the child a bag-load of information at all cost. For the children of a particular village information about Japan might be useful, while for the children of another village that knowledge would be unnecessary. The teacher should be able to give useful information without cramming the children with information for which there was not demand arising from the craft or the surrounding village life.

Dr. Abdul Hamid Kazi said that he could not accept the position that correlation was a fallacy. The fundamental ideology lying behind the idea of a correlated teaching was that life is a unity and man, whether he is a grown up man or a child, is connected with his physical as well as social environments. They should teach the child that the human being with his intellectual faculties could conquer nature.

They should gradually introduce the child to his social and political environments. They did not want to make only craftsmen of their boys. They should develop also the personality of the child and his intellectual and spiritual capacity.

Sjt. Kaka Saheb Kalelkar said that he had listened to Bharatanandaji with great attention but he felt that Bharatanandaji was looking at the basic scheme from a narrow angle. They had to improve the cultural as well as the economical level of the village people no doubt, but that was not the final aim of basic education. The aim was to impart knowledge of all the subjects through a craft, and thereby bring it nearer to life. To make the craft-teaching scientific and complete was not the only aim. We must remember that basic education has not only to replace the present village school, but has also to serve as a base of all higher education. It must be adopted in villages as well as cities.

The President observed that there was real difference in outlook between Sri Bharatananda and the speakers who succeeded him. The crux of the issue was: should they look upon the craft as primary and the teaching of knowledge which will be useful for the betterment of the child's personality as secondary? He personally felt that the Wardha scheme was apt to be somewhat subtracted from if they were so to emphasize the craft as to neglect other important aspects. The most useful way in which they could approach the problem was to look upon the craft as a medium of education for the fullest development of the personality of the child. The teacher had to visualise what was the knowledge that he would nurture. He should not content himself with making the child a craftsman but should try to fit him to enter the kingdom of heaven and to be a good citizen of his country and of the world.

The Conference adjourned till 6 *p.m.*

The discussion on the technique of correlated teaching was continued at 9 *p.m., Sjt. Kakasaheb Kalelkar presiding.*

Sjt. Kakasaheb Kalelkar opened the discussion by emphasizing the importance of evolving a vocabulary of technical terms of basic education.

"As this new scheme of education is gradually evolved into a science," he said, "it will be necessary to evolve a vocabulary of technical terms along with it. All great languages like English, Sanskrit and Arabic had their accepted vocabulary of exact scientific terms. Today we need in our provincial languages a similar vocabulary of scientific and technical terms which must be agreed upon by common consent."

"This new scheme of education," he continued, "advocates a new method of education—the method of imparting all knowledge through the medium of a basic craft. The knowledge thus given will therefore not be abstract information, but living knowledge integrated with life. It will not be fragmentary and unrelated knowledge but organized knowledge—organized in relation to some basic craft of national importance—thus serving the needs of national economy."

"In English this new method is described as the method of correlation or co-ordination. We have not yet decided upon a similar technical term in our language for this new method. It is however necessary to decide upon such a common term for the future development of our work on scientific lines."

He then described the various terms used to describe correlation such as *Samavaya* and *Anubandha* and advocated the use of the word *Anubandha*.

Mr. Mukhtar, of Basic Training School, Srinagar, desired that the technique of correlation should be discussed at greater length. He wanted to place before the conference two points for consideration. The first was that an attempt should be made by all training centres at the preparation of a tentative correlated syllabus for the guidance of the teachers who were entrusted with the field work in connection with basic education.

Secondly, that the conference should give its attention to the question of the preparation of the text-books for basic education. He suggested that the necessary literature of basic education should be prepared at the training centres and basic schools. These text-books should be scrutinized by an *ad hoc* body, and only the books recommended by this body should be introduced in the basic schools.

Mrs. Harper, of Rural Teachers' Training Centre, Moga, Punjab, suggested that the term "the technique of co-ordinated teaching" was better than "the technique of correlated teaching." This was an experiment where they were trying to teach the child through actual living experience. In order to get the full educational benefit out of the experience it was necessary that the experiences should be controlled and guided by the teacher in charge of a class. Further, each experience in the educational process of the child must lead to some larger experience. This was exactly what the scheme of basic education attempted to do. That is why it advocated education through crafts. Every craft had evolved out of some human need. The basic craft of spinning, for instance, had evolved out of the human need of clothing and the child who had received the experience of spinning was ready for the larger experience of life. While learning the craft the child was being helped to understand the world in which he was living and to work co-operatively with a group to make the world a better world.

She did not think therefore that the problem of correlated teaching through a basic craft would present any difficulties if it were followed with faith.

(3) FINANCIAL AND ADMINISTRATIVE PROBLEMS CONNECTED WITH THE INTRODUCTION OF BASIC EDUCATION

On 31st November at 8 a.m. Professor K. G. Saiyidain presided.

The discussion was opened by *Sjt. S. K. Shrikrishnadas Jaju* in the following words:

The subject for discussion today is the financial and administrative problems connected with the introduction of basic education. This discussion presupposes that we accept education through crafts as the best form of education, for there is no doubt that the introduction of basic education will prove much more expensive than the existing system. We shall need nearly twice the space we need today for school buildings. There will be the additional expenditure on the necessary equipment and material for the basic crafts. We shall need not only more teachers but better qualified and better equipped teachers, and shall have to pay them higher salaries. Today the average pay of a primary school teacher in some places is Rs. 12/15 per month but the minimum salary of a teacher .of basic education has been fixed as Rs. 20. Similarly, supervision under the basic system will prove more expensive than it is today. Today an inspector is supposed to be responsible for 100 to 150 primary schools but a supervisor of basic schools will not be expected to supervise more than 40 to 50 schools. Thus basic education in practice will prove a more expensive proposition in every respect. This aspect of the experiment has frightened some administrators and educationists and they are hesitating to extend the scope of the experiments. But, as educationists, can we afford to delay or to hesitate? We have had the experience of so-called literary education for a century and more, and it has not helped us. Can we afford to waste any more time or energies on a system about whose worthlessness there are no doubts?

The problem of education for us is a life and death problem, for it is a problem of preparing the next generation to carry the national life a step forward. We have to meet the necessary expense. We cannot afford to say that we have no money for the basic education of our children as the Government of India never says that it has no money for the military or imperial services. The money has to be found.

I would like to draw the attention of the Conference to the fact that basic education will not prove as expensive as estimated. The standard expected after seven years of basic education is Matriculation minus English, that is to say, basic education covers a large part of secondary education.

Secondary education today is an expensive process, and the expenses are not grudged. The school buildings are large and solidly built, with an air of grandeur about them. The furniture and equipment, benches, tables and chairs, library books and laboratory equipment all cost money. The teachers, headmasters and inspectors of secondary schools are well-paid. Basic education will not prove expensive as compared to the present day expenses on secondary education.

The basic schools will need large buildings, but they can be built simply and inexpensively. The supervisors may be paid less and their travelling expenses will be considerably lower as they will be expected to supervise fewer schools and within a compact area. If we take a long view of things we shall discover that the expenses on basic education are not so alarming as estimated.

The expenses of basic education will also depend upon the basic craft that is selected as the medium of education, for some crafts need more initial expense on material and equipment than others. Though the educational and not the economic possibilities should weigh with us in the selection of a basic craft, yet we cannot totally leave out of account the question of the initial and current expenses and the disposal of the products of the craft.

Of all crafts or industries which can be used as vehicles of education the most suitable and educative is certainly agriculture, and spinning comes second; as both these crafts satisfy basic human needs. But it will be neither practical

nor profitable to introduce agriculture as a basic craft widely in a number of schools. In the first place agriculture requires hard manual work which is beyond the strength of children. Further it will be difficult to get sufficient land, and necessary buildings, implements etc., to run a basic school with 200 children. The care of plants, and other farm accessories is a great responsibility. Unless proper arrangements can be made for irrigation, agriculture, dependent on the uncertain mercy of the heavens, will not be an economic proposition. On these considerations agriculture or gardening has been suggested as a compulsory subject in the first five grades of the basic course and can be adopted as a basic craft only in grades VI and VII in a limited number of schools.

Similarly the crafts of woodwork, pottery or leather work can also be introduced as basic crafts only in a limited number of schools. Their educational possibilities are limited. They need more in the way of material and equipment, and their possibilities as a future means of livelihood are also scarce.

The basic craft in a school is primarily selected as a vehicle of education—yet there is always the consideration that it may also, if necessary, serve as a means of livelihood. The millions in Indian villages will not as a rule be able to leave their villages in search of a livelihood and must depend on the village for their living. A village can afford to maintain only a few in the way of potters or carpenters or blacksmiths.

In this experiment of basic education we have also to consider the problem of the disposal of the products of the basic schools. The economic aspect of the basic craft selected as the medium of education is a matter of vital importance and while selecting the basic craft the workers of basic education have to keep the village economy before their minds. They may select only such crafts as will fit in with the village economy of this country and whose products can be absorbed in the villages. It will be difficult with the present economic condition of the masses of India to find a market for articles of cardboard, wood, metal or leather in large quantities.

From all these considerations it is evident that spinning will be the most suitable craft for most schools, both educationally and economically. Its educational possibilities and points of correlation with all branches of human knowledge are greater than in any other industry with the exception of agriculture. Its requirements in the way of equipment etc. are the least. Its finished product—cloth—fulfils one of the basic human needs and is an object of universal utility. In its different processes this craft includes many others as subsidiary industries and can provide occupation for millions, both men and women, old and young.

Some educationists have suggested that a single basic craft may prove monotonous as a vehicle of education and have suggested that a school should provide for a variety of crafts, out of which the children may choose according to their individual taste and interest. It is to be feared that those who thus speak of the necessity of variety in crafts in education are out of touch with the realities of life. India is a poor country and a country of villages. The scheme of basic education is a scheme of free and compulsory education for all village children in India. We cannot provide a variety of crafts in the basic schools in the seven lakhs of villages of India in order to satisfy the educational experts who have borrowed their theories from the rich western nations.

Even educationally, is the cry for variety a sound theory? Is it not more educative to follow one craft scientifically and systematically in all its aspects and branches than to flit restlessly from one hobby to another? Take the case of spinning and weaving. Can it not through all its processes, beginning from the growing of cotton to the finished product of cloth, offer as wide and rich possibilities of education as the desultory teaching of two or three crafts?

As far as I can see the most suitable basic craft in the first five grades of the majority of rural basic schools will be spinning. It will be possible to provide for weaving and agriculture, which will include fruit and vegetable gardening in the sixth and seventh grades. The children may select one of these two according to their interest and necessity. The number of basic schools in urban areas will vary according

to their population, and it will be possible to provide for a variety of crafts, such as cardboard-modelling, leather work, wood and metal work in these schools. The Zakir Hussain Committee has discussed the self-supporting aspect of basic education. This has been the most severely criticized aspect of basic education, nor do I insist upon this aspect of basic education. Yet this is also true that it will never be possible to introduce free and compulsory education on a mass scale in this poor country unless there is some possibility of an income from the educational process itself. Therefore some time or other this problem has to be faced and faced honestly.

The responsibility for all capital expenditure on buildings, equipment etc. rests ultimately with the State or institutions of local self-Government, but it will be a great help in enlarging the number of basic schools if the schools themselves could contribute to the current expenditure through the crafts. This is possible only if the produce of the crafts could be sold with a slight margin of profit. But we have to be clear on the point that this is a difficult proposition in the present-day economy. The only products of basic education will be products of handicrafts and as such they will not be able to compete in the open market with machine-made goods, except perhaps in the case of carpentry.

Though there is no obvious direct relationship between basic education and the problem of industrialization or of decentralized village industries as the basis of our national economic structure, yet in my opinion the practicability of an economy of decentralized village industries and of basic education are so closely inter-related that it is not possible to separate them. The success of one is dependent on the success of the other. Whether for the sake of the produce of the basic schools or whether to enable the students of basic education to earn their livelihood, it is necessary that our economic structure should be one that recognizes the place of rural and home industries. After all, the claim put forward by village industries is a very modest one. It only pleads that the few industries necessary for the fulfilment of the elemental necessities of human life in the villages viz., those of food, clothing and shelter, may be reserved as the field of rural

handicrafts, i.e., may be protected from exploitation by *big machinery*.

Basic education cannot be self-supporting unless some fundamental changes are made in our economic structure, otherwise all we can claim will be that handicrafts as practised in the basic schools will certainly not mean a financial loss, though they may not bring a profit. Even at prevalent market rates, the produce of the basic crafts will meet the cost of the raw material and the depreciation in craft equipment. Anything less than this will be due to some weakness or inefficiency in organization.

The Zakir Husain Committee has recommended that the State should be responsible for the marketing of the products of the basic schools and should credit to the schools the amount realized. But the Education Department alone will never be able to shoulder the burden of the disposal of the products of the basic schools, without some assistance from the Provincial Governments. The Provincial Government should organize stores under the Department of Industries, and arrangements should be made to collect the produce of the basic schools in these stores. The responsibility for the disposal of these products should rest with the Provincial Governments but the amount realized should be credited to the Department of Education at suitable fixed rates. The Government should absorb all the articles that it can in its own different departments, and the surplus should be sold in the open market. Ultimately, there is no question of profit and loss as regards the articles which the Government absorbs for its own use. Supposing the Government buys articles at rates higher than the market rates and credits the amount to the Department of Education. This shows an income in the Department of Education, and a deficit in the department that buys the article—but the profit in one department will balance the loss in the other.

The problem of profit and loss arises when we have to sell the articles in the open market. Therefore if the scheme of basic education is to be made self-supporting it is absolutely necessary for the Government that the products of the

basic schools should sell in the open market at suitable prices.

This problem is even more complicated where primary education is the concern of local self-government, for here the articles will be produced in schools under the control of district boards or municipalities, while the responsibility for the disposal of articles will rest with the provincial governments. A few days back the representatives of all bodies of local self-governments met at Wardha to discuss this question under the presidentship of the then Prime Minister Pandit Ravishankar Shukla and they passed the resolution that the provincial government should buy the produce of the basic schools at fixed rates in order that the schools may recover full payment for the raw material used and partial payment for the hours of work put in by the children—so that the craft work in the basic schools is not a financial loss. Unless the provincial governments assist the bodies of local self-government, it will not be possible to extend the scope of basic education.

I have said before that spinning has the first place as a basic craft in the scheme of basic education, but I must also say at the same time that the disposal of the product of spinning is a difficult problem. Khaddar or cloth woven by hand from hand spun yarn is more expensive and less attractive than mill cloth, and suffers from the additional handicap of prejudices both political and intellectual.

It is therefore necessary that I should speak here in a little more detail about the solution of this difficult problem —the consumption of khadi. If we had, as we hope to have, full control of our Government, we should have to organize our economic structure so that khadi becomes the current coin in clothing. It is only in such circumstances that the disposal of khadi will not be a problem and basic education too will be to a certain extent self-supporting. Until such time, it is necessary that children and teachers in our basic schools, as also inspectors and other educational officers should wear uniforms made of khadi, and that all institutions of local self-government and all departments of the provincial government should use only khadi for all their needs of cloth. Then only the surplus will be sold in the open

market. The All India Spinners Association will certainly render all necessary assistance. They will help in the selling of khadi. Under suitable conditions they will also give in exchange for yarn produced by the children in schools, cloth suitable for use in institutions and government departments. The Council of the All India Spinners Association has passed a resolution to the effect that the Charkha Sangh or A. I. S. A. should render all possible assistance to the provincial governments in the consumption and use of the yarn produced in the basic schools, provided it means no financial loss to the Association.

But the primary condition for this arrangement is that the Education and other departments, the Provincial Government and the institutions of local self-government, should use khadi as suggested above before they persuade or compel others to do so.

I would like to say a word or two regarding the administrative aspect of the problem before I finish. Today primary education is in the hands of local bodies and the government has very little control over it. I hear that the Bombay Government is planning to extend its control over primary education. Now primary education is a thing of such vital national importance that we cannot afford any negligence or inefficiency. It would be most welcome if the bodies of local self-government would carry out their responsibilities conscientiously, but the little experience I have had so far of the working of primary education through local self-government does not justify this hope. Unfortunately, the instances of the work of education being hampered or corrupted by local politics, love of power etc. are numerous. I would therefore suggest that as our agencies of local self-government do not seem to be capable of fulfilling the responsibility entrusted to them, they should at least hand over the control of basic education to the provincial government, and the provincial government should always check up any deficiencies in the working of primary education. This is my personal opinion and I place it here before the conference because of my conviction that for the very sake of our national welfare we cannot afford any lapses in the working of basic education. Moreover basic education stands in need of earnest and

devoted workers, and will never be a success, unless it can be lifted above the level of party politics.

Secondly, the syllabus of basic education is intimately related to the social environment of the child, and thus the process of education will be incomplete without the co-operation of the local community. Besides if the system of education is to be organized on economic lines, it is essential that educational institutions should work under the direction of local intelligence. Therefore it is necessary that all governing bodies of institutions of basic education, whether training schools or basic schools, should include capable representatives from the local community, and should be given the necessary powers to render effective co-operation. This committee will also be of assistance in the initial consumption of the produce of the school by the local community, and only the surplus should be forwarded to the provincial government after meeting the local demand. The basic crafts in the basic schools of a district should be so organized that as far as possible the local needs may be satisfied by the workers of the schools themselves.

I do not go into the details of the expenses for the introduction, as the next speaker will deal with the subject.

Rao Sahib D. K. Mohoni, Special Officer for Basic Education, C.P. & Berar next read the following paper on

The Financial Implications of Basic Education

The question before us is what additional expenditure will be necessary for the introduction of basic education in the existing primary schools. A word of explanation is necessary here to explain the term additional expenditure. We are contemplating here not the opening of new basic schools but the gradual conversion of existing local board schools into basic schools. Thus the existing school buildings with a few slight additions will be available for the correlated teaching of the basic craft, and the teachers' salaries will continue to be met as they are being met today by the local boards. The small sum which is being spent today on such school equipment as blackboard, chalk, paper and pencil etc. will continue. By additional expenditure I mean therefore expenditure other than what we are spending today on primary education. This

additional expenditure can be sub-divided under four main heads:

1. Capital expenditure on building etc.
2. Capital expenditure on craft equipment.
3. Current expenditure on raw material, such as cotton.
4. Current expenditure on craft equipment, repairs, etc.

An attempt has been made below to prepare estimates regarding the annual income and expenditure of the first two grades of basic school with spinning as the basic craft. In the absence of figures based on actual experience we have taken the figures given in the report of the Zakir Husain Committee as the provisional basis of our calculation.

Provisional estimate of expenditure (*both capital and current*) *of grade I in a basic school with spinning as the basic craft for a unit of 30 children.*

Table No. I

Building		Equipment	
Carding space 30 ft. × 5 ft. = 150 sq. ft. Expenditure at the rate of 8 annas per sq. ft.	Rs. 75-0-0	Taklis 90 @ 0-2-3=	11-4-0
		Winders 40 @ 0-1-3	3-2-0
		Balance small	2-0-0
		Balance big	2-0-0
		Almirah	5-0-0
		Tins etc.	5-0-0
		Carding sets 5	7-8-0
		Medium carding bow 1	1-8-0
		Testing strength set	2-10-0
	75-0-0		40-0-0
Raw material		**Current expenditure**	
Slivers. 34 seers @ 1-2-0 per seer	Rs. 38-2-0	Guts etc.	Rs. 8-0-0
Cotton 63 seers @ as. 8 per seer	31-8-0	Contingencies	5-0-0
	69-10-0		13-0-0

Total expenditure Rs. 197-10-0.

N. B.: 1. The carding space has been calculated on the assumption that five pupils out of thirty will be engaged in carding by turns.

2. Three taklis and one winder have been provided for each child.

3. Ten extra winders have been provided because it is

better to unwind the yarn after soaking it in water. The children can use the extra winders for this purpose.

4. Carding begins only in the second term of grade I. Children will therefore have to be supplied with ready-made slivers in the first term. The slivers required have been calculated on the assumption that each child would spin yarn weighing one seer and six chataks in the first term. Wastage of 10% is included in this estimate. Rates for slivers have been calculated at Rs. 1-2-0 per seer on the assumption that the slivers will be made of Rozium cotton. In the second term pupils will be taught to make slivers from ginned cotton. The quantity of cotton required has been calculated on the assumption that each child will spin yarn weighing two seers and four chataks in the second term. Allowing deduction of 25% for illness etc., thirty children are expected to spin yarn weighing 50 seers and 10 chs. 63 seers 4½ chs. of ginned rozium cotton at 8 annas per seer have been provided for on the assumption that 1¼ seers of ginned cotton will be necessary for spinning a seer of yarn. We should expect additional expenditure on guts etc., while the pupils learn carding. The accepted current expenditure for a trained average carder is one anna per seer of ginned cotton. For children the expenditure has been calculated as twice that of adults. Provision has been made for Rs. 5 as contingency for having the carding done by hired labour in case the children are not able to do sufficient carding.

Provisional estimate of annual expenditure, both capital and current, of grade II in a basic school with spinning as the basic craft for a unit of 30 children.

Table No. II

Building		Equipment	
Carding space as in grade I	Rs. 75-0-0	As in grade I	Rs. 40-0-0
		20 ginning rods and plank	5-0-0
		2 village gins	5-0-0
		30 Kisan charkhas	90-0-0
		Carpentry set for repairs	7-12-0
		2 big tin drums for storing cotton	10-0-0
	Rs. 75-0-0		Rs. 157-12-0

Raw material		Current Expenditure	
75 seers Rozium		Guts etc.	Rs. 15-0-0
cotton @ as. 8	Rs. 37-8-0	Contingency	6-0-0
	,, 93-12-0		,, 21-0-0

Total expenditure Rs. 348.

N. B. 1. In this grade provision has to be made for the necessary equipment for two new craft processes namely—ginning and spinning on the charkha.

2. In the first term each child is expected to spin 2 seers and 10 chs. of yarn. Allowing for a deduction of 25% for illness etc., it comes to seer and 15½ chs. of yarn per child i.e. nearly 60 seers of yarn for the whole class. This would require 75 seers of cotton. Rozium cotton can be supplied in the first term, as the count of yarn is not expected to be above twelve.

3. In the second term each child is expected to spin three seers and 3½ chs. of yarn. Allowing for a deduction of 25% owing to illness etc., it comes to 2 seers 6½ chs. of yarn per child. This amounts to 72 seers 6 chs. for the whole class. This would require 90 seers of cotton. Verium cotton at 10 annas per seer will have to be provided as the average count expected is fourteen.

4. It is expected that the pupil will card better this year and therefore the current expenditure on guts etc. has been calculated as 0-1-6 per seer of cotton instead of 2 annas per seer as in Grade I. Thus the total additional expenditure for introducing basic education in grades I and II with thirty children in each grade will be Rs. 545-2-0. Impatient critics may therefore say that this scheme is not practicable as it is not possible for either the provincial government or local bodies to spend such a large sum on the introduction of basic education even in grades I and II in each school. But if one studies the question more thoroughly one discovers that the actual expenditure is not Rs. 550 but appreciably less. Let us distribute the expenses under the four heads mentioned above.

Table No. III

Building		Equipment	
Grade I	Rs. 75- 0-0	Grade I	Rs. 40- 0-0
„ II	„ 75- 0-0	„ II	„ 157-12-0
	„ 150- 0-0		„ 197-12-0

Raw Material		Current Expenditure	
Grade I	Rs. 69-10-0	Grade I	Rs. 13- 0-0
„ II	„ 93-12-0	„ II	„ 21- 8-0
	„ 163- 6-0		„ 34- 8-0

Of the above expenditure, the first two items under building and equipment being capital expenditure should be spread over a number of years, allowing 10% for depreciation and repairs. The money spent under the third head, namely raw material, will come back to us from the sale of khạdi or yarn. Still for the sake of calculation an allowance of 5% may be made as interest on the money invested on raw material. The only real expenditure is therefore under the heading of current expenditure.

The following table gives the figures of the estimated real expenditure:

Table No. IV

Grade I		Grade II	
Building Rs. 75-0-0		Building Rs. 75-0-0	
Depreciation @ 10%	7-8-0	Depreciation 10%	7-8-0
Equipment Rs. 40-0-0		Equipment Rs. 157-12-0	
Depreciation @ 10%	4-0-0	Depreciation 10%	16-0-0
Raw materials Rs. 69-10-0		Raw material Rs. 63-12-0	
Interest @ 5%	3-8-0	Interest @ 5%	4-12-0
Current expenditure	13-0-0	Current expenditure	21-8-0
Total	Rs. 28-0-0	Total	Rs. 49-12-0

From the above table it is clear that the problem of expense resolves itself to an amount of about Rs. 30 for Grade I and about Rs. 50 for Grade II.

To meet the expenditure the state may be justified in raising a loan, paying interest at the rate mentioned above. Thus we find that the criticism that the estimated expenditure for the introduction of basic education is prohibitive is not found on facts.

Now let us come to the productive aspect of the experiment of basic education.

Table No. V

Estimated annual income in grades I and II of a basic school with spinning as the basic craft.

Grade I		Grade II	
Income per child	Rs. 3—9-0	Income per child	Rs. 9-5-3
Less 25%	„ 0-14-0	Less 25%	„ 2-5-3
	„ 2-10-9		„ 7-0-0
30 children	„ 80-2-6	30 children	„ 210-0-0

A comparison of tables No. IV and V reveals the fact that an expenditure of Rs. 28 in grade I gives a return of Rs. 80 and an expenditure of Rs. 50 in grade II gives a return of Rs. 210.

In other words there is no financial loss even if the children in the first and second grades attain one-third of the standard expected in the syllabus of basic national education. Actual experience has also shown that the standard set by the syllabus can easily be attained by the children in grades I and II.

The following conditions must however be fulfilled in order to attain the standard as laid down in the syllabus of basic national education and bring out the economic possibilities.

1. The time devoted to craft work must be three hours per day.
2. No teacher must be responsible for more than 30 children in a class.
3. All the necessary equipment, as laid down in the Zakir Husain Committee's syllabus or as described here, should be supplied to the class.
4. The teacher must be an expert in spinning.
5. The wages be calculated according to the rates laid down in the syllabus of basic national education.

This last point needs a little careful consideration, for the real difficulty in the introduction of basic education with spinning as the basic craft centres round the consumption of khadi and not around the initial expense on buildings,

equipment etc., as feared. Today khadi is not current coin and at the rates fixed by the A. I. S. A. is much more expensive than either mill or foreign cloth. Thus the question how we are to dispose of the khadi produced in basic schools still remains to be solved. Before attempting to answer this question we should try to ascertain the quality and quantity of yarn and cloth produced in the basic schools.

The following table gives the figures regarding the production of yarn and cloth in the first two grades of a basic school, calculating each grade as unit of 30 children.

Table No. VI

Grade	Total yarn produced seers.	chs.	Cloth Sq. yds.	Rate Per yd.	Sale value Rs.
Grade I	81	9	450	0-6-0	168-12-0
Grade II					
First term	59	1	360	0-6-0	135—0-0
Second term	72	3	517	0-6-6	210—0-0
Total	212	13	1,327		Rs. 513-12-0

The problem is thus one of consumption of khadi worth Rs. 500 per year for grades I and II of a basic school.

The report of the Zakir Husain Committee has suggested that the state should be responsible for the marketing of the products of the basic schools. This means that the state should protect the industry of khadi. Here are a few suggestions showing how the provincial Governments could dispose of khadi. They can in the first place try to bring down the cost of production of khadi. If the yarn produced in the basic schools is woven in the jails, the cost of production will be reduced but the Charkha Sangh will have to arrange for the preliminary training in the weaving of hand-spun yarn. A certain proportion (say 5%) of the salaries of all Government servants drawing over Rs. 50 per mensem could be paid in cloth instead of in money. The Government could insist on khadi uniforms for teachers and pupils of basic schools, and could consume khadi in the different departments.

These are a few suggestions regarding the disposal of khadi. If the Government officials started wearing khadi it would have a wholesome influence on the middle and upper classes and they might also begin to use khadi.

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	,, 2-10-9		,, 7-0-0
30 children	,, 80-2-6	30 children	,, 210-0-0

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The report of the Zakir Husain Committee has suggested that the state should be responsible for the marketing of the products of the basic schools. This means that the state should protect the industry of khadi. Here are a few suggestions showing how the provincial Governments could dispose of khadi. They can in the first place try to bring down the cost of production of khadi. If the yarn produced in the basic schools is woven in the jails, the cost of production will be reduced but the Charkha Sangh will have to arrange for the preliminary training in the weaving of hand-spun yarn. A certain proportion (say 5%) of the salaries of all Government servants drawing over Rs. 50 per mensem could be paid in cloth instead of in money. The Government could insist on khadi uniforms for teachers and pupils of basic schools, and could consume khadi in the different departments.

These are a few suggestions regarding the disposal of khadi. If the Government officials started wearing khadi it would have a wholesome influence on the middle and upper classes and they might also begin to use khadi.

The problem of the consumption of khadi is not insurmountable provided it is tackled in earnest. Where there is a will a way will be found.

Rao Saheb Ramsaran Upadhyaya, Secretary, Basic Education Board, Bihar, *next placed before the conference a short account of the financial and administrative aspect of the introduction of basic education in Bihar.*

He said:

I shall now place before the conference a short account of how the administrative and financial problems in connection with the introduction of basic education were met in Bihar.

The experiment of basic education is being carried on in a compact area 13 miles long and 8 miles wide, in the district of Champaran. This area selected for experiment is entirely rural and the nearest town Bettia is seven miles away. Bihar is one of the backward provinces as far as education is concerned and the selected area is one of the most backward in the province of Bihar. Educational facilities in this area were almost negligible before the introduction of the experiment, and the total area of 100 square miles boasted of only 1 middle school, 1 upper primary and 7 lower primary schools. The population is poor, the majority being landless labourers, with a few peasants. By far the greater number are Harijans and untouchables with a sprinkling of Mohommedans and fewer upper caste Hindus. Though the soil is fertile the people are poor; food and clothing are scarce. During the rainy season the roads are impassable and the villages surrounded by water are practically inaccessible. It was in such an area that 35 basic schools were opened as an experiment in April and May 1939 during the annual session of the Gandhi Seva Sangh at Brindaban. Only the first grades have been started during the first year of experiment, one grade will be added each year until by the end of the seventh year we hope to have full seven grade basic schools working in this area. This will be in the year 1945, and by the beginning of the year 1946 we hope to send out the first batch of pupils who have completed the full course of basic education. The first grades of the existing primary schools have been amalgamated with the first grades of the

basic schools, and it is proposed to continue this process of conversion so that all the lower primary schools will be absorbed in the basic schools by the end of three years, and the upper primary schools and the middle schools during the next five and seven years.

Now I shall say a few words about the land, building and equipment in these basic schools, the qualification and salaries of the teachers, the utilization of the old teachers and the disposal of the produce of basic schools. These schools are mostly situated outside the villages with possibilities of future expansion. The primary school buildings in our province are usually of two types. They are either huts or shacks built by villagers and hardly provide sitting accommodation to the school children. The other type are the pucca buildings built by the district boards with brick walls and tiled roofs, costing one to two thousand rupees each. While building the new basic schools we were guided by the consideration that the scheme of basic education was a scheme of free and compulsory education for all children, and thus the expensive solid buildings put up by the district boards or P. W. D. were beyond our reach and would not serve our purpose. Our schools though they may be built of materials easily available in the villages and follow the prevalent style of rural architecture, in keeping with the economic standards of the villages, should be spacious, well ventilated and well lighted structures which can be kept clean with ease. These school buildings could then serve as models to the villagers and could show them how to bring more light and air into their own houses and how to keep them clean. Thus the basic education initiated an experiment in rural school buildings side by side with the experiment in basic education. For opening the first grade in the first year it was decided to erect a school building with a hall of 600 sq. feet, a store room (300 sq. ft.) and a small quarter for the teacher, including a small bedroom, a kitchen and a small courtyard within a compound of 300 sq. ft. The walls are to be made of mud wattle supported by bamboo frames with a coating of whitewash and broken by many windows of bamboo framework. The verandahs are to be supported on wooden frames with thatched roofs and the floor was to

be of mud and cowdung. The doors too were to be of bamboo framework with iron hooks for fastening and unfastening. Such a school building with the teacher's quarters was estimated to cost about Rs. 250. If local co-operation had been available, the school buildings could have been completed within the estimated sum, but the work had to be entrusted to contractors, as the local workers were busy with the preparations for the session of the Gandhi Seva Sangh and there was very little time at our disposal, and the expenses thus came to about Rs. 300 per school building.

The buildings were ready in time and the schools started work. However, experience showed that the mud and wattle walls were not sufficiently strong for our purpose, and with thatched roofs one lived in constant fear of fire in the summer days of high winds. Again, the school buildings being outside the villages were certainly free from infection, but on the other hand water collected in the surrounding fields during the rains and the floor became too wet for use.

A second experiment in school buildings is therefore being initiated from the second year of the experiment. These school buildings will have walls made of bamboo framework with a coating of mud, supported by wooden posts with tiled roofs and doors of wood. The school floor will be at least 3 ft. higher than the surrounding fields. Movable trench latrines made of corrugated iron sheets and supported on iron posts with a dry earth store will also be provided in every school compound to meet the problem of sanitation. A school building and teacher's quarter on this new pattern has proved to cost about Rs. 500. A full seven grade basic school with workshops, craft rooms and teachers' quarters was estimated at Rs. 2,000 according to the old plan and will cost Rs. 4,000 according to the new scheme. This estimate includes the expenses for the installation of a tube well in each school for drinking water and gardening.

The following has been supplied to each school by way of furniture and equipment. Each child is supplied with a wooden seat, a collapsible wooden desk, which can be opened for reading and writing and folded flat for craft work, and with squares of black cardboard. The teachers have been

supplied with wooden platform with blankets for work and an almirah for keeping school equipment. To help the teacher with his work, each school has been supplied with a clock and a small library including books on general science, social studies, pedagogy and economics of village industries. Attempts are also being made to supply the schools with charts and posters describing life in other lands and other items. The Government has sanctioned Rs. 120 under this head per year for each school for the next seven years until the experiment is completed. Rs. 30 have been spent on the necessary equipment for spinning and gardening, such as taklis, winders, carding bows etc., for grade I in each school.

Thus a sum of Rs. 400 has been spent on building, equipment, furniture etc. in opening grade I of each basic school.

The following is an approximate estimate of the expenses (on building and equipment) for the following six years of the experiment.

Second year	Rs. 400	
Third year	Rs. 470	(Charkhas will be introduced along with taklis during the third year of the basic course.)
Fourth year	Rs. 420	
Fifth year	Rs. 500	
Sixth year	Rs. 625	
Seventh year	Rs. 625	
Total expenses for the full seven years of the experiment.	Rs. 3,500	

Where agriculture is introduced as a basic craft in grades VI and VII instead of weaving, there will be an additional expenditure of Rs. 1,500 for grades VI and VII. Thus the total expenditure on buildings, equipment etc. will amount to Rs. 5,000 and has been distributed over the seven years of the basic course. The new types of stronger and better school building described above and the full equipment have been included in this estimate which comes to Rs. 5,250 for basic schools with spinning and weaving as basic craft and Rs. 6,750

for schools with agriculture as basic craft. The cost of land is not included in this estimate as land was acquired free and it is hoped will be similarly acquired in future. Where land has to be bought the total expenses will amount to Rs. 5,500 and Rs. 8,000 respectively.

Now we shall consider the problem of the qualification and payment of teachers who are carrying out the experiment of basic education, and the utilization of the older teachers. We are working on the assumption that this scheme cannot be carried out by teachers without faith and enthusiasm. Therefore we admitted for training only teachers whose academic qualifications were of the matriculation standard, who believed in the programme of rural reconstruction and village industries, and had shown some inclination for social service and faith in this new scheme of education. Preference was given to those candidates who combined previous teaching experience with these qualifications. The average salary of primary school teachers in Bihar today is Rs. 9 per month. We cannot expect to get teachers of the type we require to devote themselves to this work on the above salary. Therefore according to the recommendations of the Zakir Husain Committee we have fixed the salary of the teachers in these experimental basic schools at Rs. 25 per month. In the scheme submitted to the Government we have also recommended that the salaries of all teachers who have completed four years of service should be raised to Rs. 30 per month for the last three years of the experiment. Each school will get an allowance of Rs. 25 per year as contingency for miscellaneous expenses. Provision has also been made for the current expenses of craft work, and the repair and upkeep of the land and buildings and the payment of rent to the landlords.

With all this expense, after deducting the amount realized from the sale of the children's produce, the annual expenditure per child will amount to Rs. 9 in the first grade during the first year of the experiment, and Rs. 3 per child after one course of seven years has been completed, provided that the production of the children fulfils the standard laid down in the syllabus of basic national education. Today the annual expenditure per child in the five-grade primary schools is

Rs. 5, in the seven-grade middle vernacular schools is Rs. 14 and in middle English schools is Rs. 18.

The next problem is that of the existing primary school teachers. For the successful and capable teachers, who are intellectually qualified to carry on this new experiment in education, and who have faith and enthusiasm for the scheme, short refresher courses can be organized for training in the basic craft and in the principles of correlation and work of the new scheme. The problem of the teachers who are absolutely unfit for this new experiment remains to be solved. At present the field of experiment is very small and a recommendation has been made to the authorities of the district board to transfer the old primary school teachers to other primary schools outside the area.

One organizer and two supervisors have been appointed for the supervision of these basic schools. The organiser is responsible for the supervision of the buildings and equipment, the purchase and distribution of raw material, and the collection and marketing of the finished product, while the supervisors' duty is to supervise and guide the work of the basic schools according to the technique of the new educational scheme. Both the supervisors were given a training of six months in the Basic Training Centre at Patna and of three weeks at Wardha, and arrangements will be made for them to attend refresher courses of three months in the training centre during the course of the next year.

The Board of Basic Education has been fortunate in securing the co-operation of Sjt. Laxminarayan, the capable and enthusiastic secretary of the Bihar branch of the A. I. S. A. and so far we have experienced no difficulty in the weaving or disposal of the yarn produced. However as the scope of the experiment is extended or when the scheme is accepted as the official policy by the Department of Education, the Government will have to appoint a special committee or board to deal with the disposal of the produce of these basic schools, and will have to control the production in the basic schools in the light of the needs of Government and non-Government agencies.

The experiment is being conducted in Bihar by the Government and at Government expenses. The Government

has appointed a Board of Basic Education with full executive powers to guide experiment in basic education. The Hon. Minister for Education is the President and the two secretaries of the Hindustani Talimi Sangh and the secretary of the Charkha Sangh are members in their capacity as experts. The Board is also responsible for the experiment being conducted in the Champaran district. The Department of Education and the authorities of the District Board fully cooperate in the work but ulimate responsibility rests with the Basic Education Board. Thus the administration of basic education has presented no problems or difficulties in this province.

So far the experiment shows a great promise of success. The exact nature or quality of the success can be ascertained only after the first experiment of seven years is completed.

An estimate of the expenses to be incurred in starting an experimental basic school for seven years, in the province of Bihar.

1st year (Grade I)

Non-recurring:

(a) Building: Provision of class and spinning room accommodation of 20 sq. ft. of floor space per student for 30 students (600 sq. ft.) plus store room (300 sq. ft.) and teacher's residence (300 sq. ft. 2 rooms and one courtyard: grass-tatti walls, bamboo-pillars and straw roofing)	Rs. 350
(b) Tube-well with cemented platform	,, 115
(c) Contingencies	,, 35
(d) Appliances for spinning & gardening	,, 30
(e) Equipments: blackboards, charts, books, mats, desks, etc.	,, 120
Total,	Rs. 650

Recurring:

(a) Pay of the teacher @ Rs. 25/- per month	Rs. 300
(b) Contingencies	,, 25
(c) Cotton seeds etc.	,, 75
(d) Repairs of buildings; rent etc.	,, 25
Recurring Total	Rs. 425

2nd year (Grade I and II)

Non-recurring:

(a) Building: class and spinning room (600 sq. ft.) teacher's residence (300 sq. ft. two additional courtyards, with bamboo-tatti-walls, wooden pillars, higher floor, tiled roofing)	Rs. 500
(b) Repairs and additional parts of the tube well	„ 10
(c) Trench latrines and urinals, corrugated sheet roofing for rains and store room for dry earth	„ 30
(d) Kachcha boundary walls with green tatties	Rs. 15
(e) Contingencies	„ 55
(f) Appliances for spinning and gardening	„ 30
(g) Equipment (as in previous year)	„ 120
Total (Non-recurring)	Rs. 760

Recurring:

(a) Pay of two teaches @ Rs. 25/- per month each	Rs. 600
(b) Contingencies	„ 25
(c) Cotton, seeds etc.	„ 175
(d) Repairs of buildings: rent etc.	„ 25
Total (Recurring)	Rs. 825

3rd year (Grade I to III)

Non-recurring:

(a) Class and spinning room and teacher's residence	Rs. 500
(b) Contingencies	„ 50
(c) Repairs and additional parts of the tube well	„ 10
(d) Appliances for spinning and gardening	„ 30
(e) Equipments (as in the first year)	„ 120
Total (Non-recurring)	Rs. 710

Recurring:

(a) Pay of 3 teachers @ Rs. 25/- per month each	Rs. 900
(b) Contingencies	„ 50
(c) Cotton, seeds etc.	„ 265
(d) Repairs of buildings, rent etc.	„ 50
Total (Recurring)	Rs. 1,265

4th year (Grade I to IV)

Non-recurring:

(As in the third year) only an addition of Rs. 20/- in the appliances for spinning and gardening	Rs. 730

Recurring:

(a) Pay of 4 teachers @ Rs. 25/- per month each	Rs. 1,200
(b) Contingencies	„ 50
(c) Cotton, seeds etc.	„ 255
(d) Repairs and rent etc.	„ 50
Total (Recurring)	Rs. 1,655

5th year (Grade I to V)

Non-recurring:

(As in the fourth year; only an addition of Rs. 80/- for class and Library).	Rs. 810

Recurring:

(a) Pay of four teachers @ Rs. 25/- and one @ Rs. 30/- per month	Rs. 1,560
(b) Contingencies	„ 50
(c) Cotton and seeds etc.,	„ 415
(d) Repairs & rents etc.,	„ 75
Total (Recurring)	Rs. 2,100

6th year (Grade I to VI)

Non-recurring:

(a) All the items as in the 3rd year	Rs. 710
(b) In a Weaving school, Weaving implements Looms & accessories.	,, 225
or	
In an Agricultural school: cattle, well and implements.	,, 2,000

Total (Non-Recurring)

of a Weaving school	Rs. 935
of an Agricultural school	,, 2,710

Recurring:

(a) Pay of 4 teachers @ Rs. 25/- and 2 teachers @ Rs. 30/- per month	Rs. 1,920
(b) Contingencies	,, 50
(c) Cotton and seeds etc.,	,, 415
(d) Repairs & rents etc.	,, 75
Total (Recurring)	Rs. 2,460

7th year (Grade I to VII)

Non-recurring:

In a weaving school (as in the 6th year)	Rs. 935
In an agricultural school (as in the 6th year but only Rs. 500/- for agricultural implements)	,, 1,210

Recurring:

(a) Pay of 4 teachers @ Rs. 25/- and 3 teachers @ Rs. 30/-	Rs. 2,280
(b) Contingencies.	,, 75
(c) Cotton, seeds etc.	,, 415
(d) Repairs and Rent etc.	,, 100
Total (Recurring)	Rs. 2,870

Total Non-recurring expenses of weaving school	Rs. 5,530
Total Non-recurring with the cost of 3 acres of land (if necessary) approximately	,, 6,500

Total Non-recurring Expenses of an Agricultural school	Rs. 7,530
(if necessary) with the cost of 10 acres of land approximately	„ 10,000
Total recurring expenses of an experimental basic school during the first period of seven years	„ 11,600
Annual expenditure of a basic school of seven grades with a teacher to each grade	„ 2,870

An estimate of the income of an experimental basic school with 288 working days in the year, with 3 hours 20 minutes per day devoted to the craft, and with 30 students attending in each grade, as calculated by the Zakir Husain Committee:

Year	Price of cotton & seeds reimbursed. Rupees	Students' wages Rupees	Total
I	75	80	155
II	175	290	465
III	265	550	815
IV	355	900	1,255
V	415	1,250	1,665
VI	415	1,440	1,855
VII	415	1,850	2,230
		Total	8,440

N.B. (1) Wages per student in different grades have been calculated at the following rates per year which is 75% of the ordinarily estimated amount of earning per head.

Grade I	Rs. 2–10—0	
Grade II	„ 7—0—0	
Grade III	„ 8–10—0	
Grade IV	„ 11–12—0	
Grade V	„ 11–12—0	
Grade VI	„ 6—4—0	Less because weaving just introduced.
Grade VII	„ 12–10—0	

Sjt. L. R. Desai, the Special Officer for Basic Education, Bombay Presidency, next gave some facts and figures relating to the experiments made at the basic school at Thamna (in Gujarat) and the compact areas in the province. As regards

Thamna, he stated, that the workers in the experiment were half-baked men who were expert neither in the basic craft nor in the new technique of teaching, and these limitations had to be borne in mind while assessing the results of the experiment. During the first six months, 150 children were put on to the craft. The age of the children varied from 6 to 15. During those six months, making allowance for the inferior quality of the yarn, the net earning was Rs. 67-8-0. From the total income, deductions were also made for the wastage. In the first few months the wastage was 50 per cent; but by the end of six months it had been brought down to 12 per cent. The latest figures for waste were 7 to 5 per cent. The total expenditure on equipment was Rs. 600/.

Taking the compact area, there were 15 basic schools working, in standards I & II, the basic craft being spinning and carding and the age of the children 6 to 8 years. The average attendance was 380, and the net income was:

	RS.	A.	P.
1st month	18	15	0
2nd month	23	6	6
3rd month	27	13	3
Total Rs.	70	2	9

Wastage in the first month was 8 per cent, second month 4 per cent, and the third month 4.2 per cent. In the third month one school did a little badly. The investment on equipment was Rs. 400.

There was also a third set of figures which related to the training centre. The previous year, before May, a short term course had been started to train teachers. The training centre was Loni. There were 49 teachers under training. The total cost of the equipment was Rs. 180. The teachers worked full three hours per day. The net profit was Rs. 80. From this figure it could be maintained that the cost of equipment could be recovered in about two years.

Sjt. Gopabandhu Chowdhuri, President, Board of Basic Education, Orissa, *next addressed the conference.*

I would like to draw the attention of the Conference to one suggestion regarding the introduction of basic education, viz., that the training centre should be established in the compact area where the experiment is to be carried out. This will have a deep effect on the practical working of the experiment.

In the first place, this will help the future teachers to come into more intimate contact with the life of the villages and make them rural-minded. In this initial stage of the experiment it is essential that the teachers should be able to devote their entire minds to this experiment. Unless the teachers have been trained in the environment in which their future work will lie, they will never be able to adjust themselves to the handicaps and inconveniences of village life; their minds will be distracted and this will seriously affect the quality of their work.

Secondly, the training centre may then serve as a research centre for the experiment being conducted in the compact area, and this will considerably help the work of the experiment both in its educational and administrative aspects. In the first place, the supervisors will be assisted in their work by the staff of the training school, and this will lessen the expenses and raise the quality of the supervisor. It will also enable the teachers in the basic schools to keep in touch with the latest researches and experiments of the training centres.

In Orissa the training centre has been established in the compact area, and the little experience I have gained during the past few months has strengthened me in the suggestion I place before the Conference.

Sjt. Parsram, Lahore, said: In every civilized country education is financed both by the State and by private non-official resources. That has been the case in India also. In fact the institutions run by private bodies are more numerous than those financed directly by the Government. That is a healthy tendency. If the whole machinery of education remains in the hands of the Government it can easily be used as a convenient tool for propaganda. To concentrate control

of education in the hands of the Government means the dawn of fascism.

It will be a happy augury if basic education too is amply supported and financed by non-official bodies, though there has been, as yet, no mention of it in the reports presented by the representatives from the various provinces.

In this country as well as in Europe, education was essentially connected with religious institutions. The Church has been responsible for imparting elementary education in Europe, and mosques and temples ran schools for children in this country. There are large religious endowments in this country which in the past also financed education. At present about eightyone crores of rupees lie invested in these endowments. Cannot these funds be utilized for financing basic education? There is one community in India which has tried to utilize its income from religious endowments for education. This is the Sikh community. The funds of the Gurudwaras are managed by committees elected by the people. These committees have allotted funds of the Gurudwaras for purposes of education also. The example of the Sikhs is well worth emulation.

Rajkumari Amrit Kaur next spoke on the disposal of the products of basic education. She suggested that in order to form an accurate idea of how far the various products of children's craft work would be marketable, the requirements of the school, the locality, local bodies and the Government should be ascertained and assessed, and this assessment should be used as a guide to the distribution of crafts in the basic schools.

(4) THE BASIC SYLLABUS IN PRACTICE

The Discussion was opened by Naraharibhai Parikh who read a paper on The Thamna Village School.

The Thamna Village School

The introduction of basic education will mean an entire revolution in the existing system of education—in the school syllabus and time-table, in the methods and aims of teaching, in the atmosphere of the school. It would go a step further—it would require a change of heart in the teachers and the guardians. They may not understand the full implications of the scheme but they must believe that it is better than the existing system and must have the enthusiasm to put it into practice.

Ever since Gandhiji placed his new scheme of education before the nation I had been on the lookout for a suitable village where it could be put into practice with faith and enthusiasm. Babalbhai, a capable and enthusiastic young village worker, had started work in a small and backward village named Masra in district Kheda from the year 1935, when he was released from jail. His influence spread to other villages, and soon a close link was established between him and the neighbouring village of Thamna with a full-fledged primary school. This is a bigger village with a population of nearly 2,000. Though the main occupation in the village is agriculture, there is a fair proportion of other castes and professions. This village could be entirely self-contained if it so willed or if it were necessary. Though a big village it was still free from the influence of the cities. These considerations weighed with us in selecting this village for the experiment of basic education. Babalbhai placed the proposal before the village and it was accepted with great enthusiasm by the villagers, the teachers and the students of the village. This enthusiasm grew instead of declining as our work proceeded. The village people have always most willingly offered full co-operation and met all our demands for the new experiment.

The village school was formerly held in a hired building which was entirely inadequate for craft work. The villagers spent about Rs. 1,500 and converted their Dharmashala and a portion of the village library for the purpose of the basic school. There was an English class attached to the village school. I felt that if the time devoted to English was devoted to craft work instead, it would help to create a proper atmosphere for the new experiment. I placed the proposal before the villagers and it was readily accepted. Training classes in spinning and carding were organized for the teachers of the school to prepare them for the experiment, and the children of the school were also given facilities for learning spinning outside school hours to create the right atmosphere for the new experiment.

Then I applied to the District Board and the Government for permission to introduce the new experiment in the village school. On 1-9-1938 the school was handed over to me for experiment. The new experiment was initiated on 2-2-1939 on the auspicious occasion of Gandhi-Jayanti (Gandhiji's birthday).

We decided to introduce the new syllabus only in the first three grades of the village school, and treated the infant class as the pre-basic class, because most of the children in this class were below seven—the age fixed by the Zakir Hussain Committee as the initial age of the experiment. The recommendation of the Bombay Government that no child should be sent to school until he has completed his sixth year is very rarely put into practice by the local boards, as parents in the middle and upper classes are anxious to send their children to school even before they are five. The Advisory Board of Basic Education in the Bombay Presidency have therefore recommended to the Government the formation of a pre-basic class for children under seven and have prepared a syllabus based on the experience of the pre-basic class in the Thamna village school. The first three grades are following the syllabus of basic education prepared for the Bombay Government.

We introduced craft work as a subject for half the school time-table in the higher classes, but experience proved that the old syllabus cannot be completed if half the time is devot-

ed to craft. One hour and twenty minutes are now given to craft and there is no difficulty in fulfilling the requirements of the old syllabus. I should also like to mention here how this new educational experiment has changed the attitude of the boys towards the process of their own education and how they object to committing such subjects as history, geography etc. to memory to satisfy the requirements of inspectors. It is possible that these boys may prove to be weak in their subjects if they are examined by the traditional methods but I have no doubt that the children have gained in alertness and general knowledge under the new experiment and there is a new life in the atmosphere of the whole school.

Th following changes have been noticeable among the students after the introduction of the new experiment.

1. The pupils are cleaner, quieter and better disciplined. They are forming habits of co-operative work and mutual help.

2. There is a new spirit of self-reliance and independence in them.

3. The general standard of their health is better and they give more attention to sports, games and physical exercise.

4. They show a greater readiness to help their parents in their field and home work. The women therefore welcome this experiment more than the men.

There is a fixed belief among our educated classes that children do not like physical or productive work. It is even said that continuous craft work for two or three hours will not only prove monotonous but will be an exploitation. Actual experience of work with the children has proved otherwise. It has justified the expectation of all progressive educationists that education through crafts is not only a more interesting process but a sounder and more effective educational method.

Next we come to the practical question as to how the different subjects such as language, mathematics, science and social studies can be and are being taught through a craft. It is not necessary to mention here that craft as a medium of education include both the physical and social environment of the child. Through these three centres of correlation it is possible to teach the entire syllabus of mathematics and a

great deal of language and geography. At the beginning of the experiment we taught by the old, conventional methods all subjects which could not be correlated to one of these three centres. But we soon realized our mistake and now we make no attempts to teach a subject that cannot be naturally correlated. We leave it for the time being, trust the craft to supply the necessary point of correlation at some later stage.

Our teachers often complain of the difficulties in correlation. It is a new method in education and the technique will have to be slowly and patiently evolved out of actual working experience. This will be possible only when some gifted teachers devote themselves to the task. The details of the completed syllabus cannot be worked out theoretically in libraries or offices by scholars and educationists. Those who take this task upon themselves must not only be familiar with the subtleties of more crafts than one, but their knowledge of nature and society, the physical and social environment of the child must be a living and intimate knowledge derived from experience and not a theoretical knowledge derived from books. When such a correlated syllabus has been prepared and tested by actual experience we shall next need teachers to put it into practice. These teachers need not be teachers of talent, but must be craft-enthusiasts, and must possess fair amount of general knowledge. We do not need specialists, but active and alert enthusiastic teachers of all-round development for our experiment.

Again our purpose will not be served by issuing instructions from above as it is done today. On the other hand, Government circulars and departmental instructions will kill the spirit of the new scheme, and mechanize it into a system. This new scheme of education is an experiment with life, and can be put into practice only by living teachers. The function of the supervisors and inspectors too must be fundamentally changed from that of issuing instructions and orders to that of guidance and leadership before they can be trusted with the handling of the experiment.

Now I shall place before you a detailed statement of the self-supporting aspect of the experiment at the Thamna village school:

The net profit out of the wages of 150 pupils in the first term of six months (actual working 133 days) from 1-10-1938 to 31-3-1939 after the deduction of wastage and other miscellaneous expenses has been Rs. 67-8-0.

The net profit in the second term of 128 actual working days for 210 children has been Rs. 48-10-0. The reasons for this decrease in earning have been

(1) That the girls' school has been incorporated into the basic school during the second term, and thus the wastage has been higher with so many beginners in spinning.

(2) The time devoted to craft work in the higher classes has been lessened in the second term.

We must admit, therefore, that we are still far from fulfilling the requirements of the self-supporting aspect of the scheme, but this has been due to the defects in our preparation for the experiment. In the first place our teachers were not sufficiently trained in the basic craft of spinning, and it must also be admitted that a great deal of wastage could have been avoided with skill and care. Craft can be a true medium of education only if the produce of the craft attains the fixed standard both in quality and quantity. Any slackness or lapse from the standard will react on the education of the child. Thus educationally the self-supporting aspect of the scheme is a matter of vital importance—an essential condition for its successful working.

I would like to make one suggestion here in connection with the productive aspect of the scheme. In consideration of the poverty of our masses it is necessary that a certain proportion of the earnings of the children be returned to them in some form or other. We know that many children of school-going age cannot attend school today because of their poverty, and try to earn a scant income through looking after the cattle or taking them out for grazing. Some have to take their parents' food out to the fields, while others are left in charge of their small brothers and sisters while their parents go out to work. They have neither sufficient food nor clothing nor can they afford to spend any money on such luxuries as slates, paper or pencil. Therefore the earning of

the school children should be spent on clothing them, on providing them a meal and on their school equipment.

I would like to mention here another thing I have not been able to put in practice in the school at Thamna. Every basic school should, in my opinion, have a well, and some land attached to it. Our children come to school in such a dirty state, that the teacher's first duty above anything else is to teach them habits of cleanliness; and thus a school well is necessary school equipment. There should also be some land attached to the school where the boys could work at gardening. This school garden should need nothing beyond seeds in the way of expense. The children would prepare the land and all waste material of the village could be utilized as manure. The fruits and vegetables produced in this garden would form a valuable addition to the children's diet which is usually very deficient in nourishment. I have placed these suggestions before the villagers and they have decided to give an acre of land for school garden and compound.

There are other activities whose value cannot be assessed in terms of money but which should form an integral part of the child's educational process. Keeping the school building and surrounding clean, repair of the school building, collection of specimens for the school museum, decoration of the school and the village for festivals, and entertainment of the villagers are a few such activities that have been included in the syllabus of social studies in basic education. Such activities bring a new joy in the life of the children, and bring them into closer and more intimate touch with their physical and social environment. They link the village and the school together in a closer bond.

I would now like to say a few words about the influence of the school on the village. The children and teachers clean the village as a part of their school programme. This has introduced an atmosphere of cleanliness in the village and the villagers have begun to keep their houses and courtyards cleaner. 78 charkhas have also been working in the village since the introduction of the new experiment in the school.

We have attempted to give a new orientation to all the village festivals. Instead of sweets, fine clothes and laziness

—the traditional accompaniment of all festivities—interesting and instructive programmes are arranged both for the entertainment and education of the villagers. Evening prayers are held every day and are attended widely by village men and women. The news of the day are given after prayers, information of gneral interest is pasted on the walls every day and has proved a great agency of popular education. We are trying to make this village a model village according to Gandhiji's ideals through the school. Our capacity is limited and the environment unfavourable. Still the measure of success we have achieved with our weak efforts has strengthened our faith in the infinite possibilities of this new scheme.

Shrimati Asha Devi next spoke on

The Segaon Village School

The topic for discussion this evening has been described as "the Basic Syllabus in Practice". If we are honest we shall describe it as "the Basic Syllabus in Evolution". For the syllabus of basic education in the true sense of the term does not exist today but has to be evolved from day to day experience of work with the children in the village schools.

The syllabus that goes by the name of "Basic National Education" is at best a compromise syllabus. It recognizes the fundamental principles of basic education, but it expressed in terms of orthodox education. It is not an integral, whole, because it is divided into the artificial compartments of subjects and grades.

Secondly, it is not a syllabus that evolved naturally out of the needs and the environment of the village child, as the true syllabus of basic education should. It is a syllabus based on our past educational experience which has been mainly limited to the education of the children of the middle and lower middle classes in the cities. Which educationist has as yet gone to the village child as the source of inspiration for the framing of a syllabus?

Thus the immediate task before us workers of basic education is the evolution of the basic syllabus—not in terms

of subjects and grades but as a dynamic organic process—out of the experience of day to day work with the children. In this task the child is to be our guide. We teachers must make a psychological effort and forget our past educational experience. We have to approach the village child with a fresh, uncoloured mind, in all humility, to learn from him what the true syllabus of basic education should be. That is the spirit in which we have approached the task in the little village school of Segaon, and I should like to tell you in a few words how we are trying to build up the syllabus round the environment of needs of the village child.

We shall begin with the physical and social environments of the children of the Segaon village. I think most of the delegates have seen the Segaon village. "Segaon" has almost become a household word today, not only in India but throughout the world; but in itself it is a most obscure little village, a group of mud huts in the midst of the bare plains of the Central Provinces. For a brief period of 4 or 5 months in the year, the fields are green; there is work for everyone old and young and there is a brief illusion of beauty and plenty. But for the rest of the year, this village lies like a speck of dust in the midst of its environments, hands idle in every home and the fields follow. There is no river, no tank; no water except from the few dirty wells that are jealously guarded by each little caste and sub-caste. There are no hills, no trees. There is no natural playground for children not even the natural heritage of fresh water.

It is as unfavourable physical environment for the education of children as can be found in any part of India.

As regards the social environment, it is a small village of 706 souls, more than half of whom are Harijans divided into their many sub-castes with their own social code. The only industry or means of livelihood of that village is agricultural labour. Out of these 706 people, 95 families are agricultural labourers, 23 families are landholding farmers, and the rest are all landless labourers. The monthly expenditure of an average family, including food and clothing and all other necessities of life is Rs. 5 to Rs. 6, and the monthly expenditure of the most prosperous family in the village is Rs. 10 to Rs. 12. The figures of the monthly expenditure tell us very effectively

what their diet is. The gentleman in charge of the farm at Segaon has prepared careful figures on the basic of the C class diet given to the prisoners in the Central Province Government jails and he found that more than 70 per cent. of the villagers cannot afford the luxury of C class jail diet. In the midst of cotton fields they are ill-clothed. This is the physical, social and economic environment of that village. In poverty, disease and filth both physical and moral, it is a fair representative of our Indian villages. The only form of entertainment in the village is gambling on small stakes. The only form of cultural, artistic, or religious self-expression is the chanting of religious songs, the mystic songs of Tukaram, repeated over and over again late at night after a day's hard labour or enforced inactivity. There is no life. This is the environment from which we have taken the child in perfect faith and hope to help him to develop into a complete, all-round individual, and a responsible and dependable member of society. The little experience of a year's work that we have had has not belied our hopes of faith.

I have told you that we have made a psychological effort to forget the syllabus and to forget our past educational experience and to approach the child in all humility to see what his syllabus should be. We began with the child and his needs. The first need of the child in that village is, as the last speaker has already pointed out, an unlimited and free supply of good, wholesome, clean water. This I would lay down as the first necessity of basic education. It is not in our syllabus of basic education, but it ought to be. So, we begin by giving the child access to water; our school work begins at the side of the well, with a lesson in cleanliness. The second thing a child needs is good food. Of course, basic schools cannot supply food; the question of food depends on circumstances, economic and political, beyond our control. But at least every school that wants to do any effective work must attempt to give the child one nourishing meal during the day. This is the conclusion we have arrived at, and is confirmed by the last speaker. So, these are the two essentials we discovered in this experiment: (1) clean supply of water and, (2) at least one wholesome meal. When we have satisfied these fundamental necessities, we can attend to the other

necessities of human nature. And there the first necessity of the child is to find some form of activity. And this activity should be a form of productive work. The whole scheme of basic education is based on the recognition of this fundamental psychological necessity of the child, an activity is as important to the growth of his mind as food is to the growth of his body. So, I shall not speak long on that. Every one who is experimenting with children, whether in private basic schools or in practising schools, knows the joy and self-confidence and discipline that this productive work has brought to the children, the hidden powers it has released. That is the common experience of all teachers of basic education.

Another necessity for him is play. The child does not need elaborate equipment for playing; he is born with the inherent power of discovery, and he can create play for himself. All that he wants is open space and an atmosphere of freedom. We have put up a spring and a ladder and slide for him. These are the fundamental necessities round which we are trying to build up our syllabus—water, food, work and play; and our four class-rooms are the well, the kitchen, of the workshop, and the field. Our syllabus may be divided into these four main subjects: cleanliness, food, work, and play.

This is as regards his individual training. But this is not enough. We have not only to help the child to grow as a complete, all-round individual but also as a responsible member of society, and this training has to begin from the beginning of the life in school. In fact, that is the main function of education. So, we help the child, as far as possible to organize the life of the school into a kind of co-operative community where every member, teacher or child, big or small, has his own duties and responsibilities which he must discharge. These duties and responsibilities are not imposed upon him by us. The children themselves choose their leaders and all this organization of their activity is centred round the children's meeting, the children's gathering, which they call मुलांची सभा. Every Saturday morning the children meet. It is a solemn democratic body, where duties are distributed, ministers are elected, the last week's work is criticized, the next week's is planned, the budget for the next week is pre-

pared, and certain children are entrusted with the marketing of their products. I would now like to give you a list of the ministers and their duties. First comes the minister for cleanliness of the compound, cleanliness of the classroom. Then the ministers of food—ministers who are responsible for organizing the meals and upkeep of the kitchen. Then come ministers who distribute the taklis and winders, spread the mats, collect the material after the school-work is over, and who are in charge of their little school equipment in the shape of slates, pencils and paper. Besides we have a minister for organizing their games, a minister who looks after their little kitchen garden, a minister whose duty is to see that the elder children do not bully the younger ones. Lastly, a minister for lice. That is an important portfolio. These are the lines on which the community is working, and the organization of work and play in the school is entrusted to the school children. We are there only to help them and guide them when they need it. They organize their play, class-work and all their activities. After six months' experience we have found that they can be trusted as responsible members of the school community; they can be trusted with money, to organize festivals, and to entertain the villagers.

But civic training goes deeper, for the children are not only members of the school community; they are members of the village community. We had great hesitation in interfering with their life in the village, because that is a problem intimately connected with the many social and economic problems. Whatever has been done has been done spontaneously and unconsciously. The first step towards the correlation of the village and the school was through the festivals. The children on their own initiative organized two school festivals; one was Ganesh Utsav, and the other Janmashtami. To these festivals they invited the villagers; they had music and worship, and they distributed *Prasad*.

Next, the only form of entertainment of the boys during leisure hours is gambling on small stakes. Everyone in the village, from the smallest child to the biggest, gambles. It is the fashion in the village. When we started work in the school, every child in the school gambled. What little they earned outside school hours also went into the gambling. A

campaign against this gambling was organized by the children themselves. They passed a resolution in their meeting that no child in the school was to take part in gambling. This was only last week, and today there is not a single child in the school who gambles. Not only that, they feel very superior to the benighted grown-ups of the village who still gamble. Next they have just started a campaign of cleanliness in the village. This is going to prove a more difficult task as they are up against the social prejudices of their parents and guardians. But the very fact that they have attempted this has been a hopeful sign. So, I think there is every reason for our faith and hope that, given the right type of education and right type of environment, the children from our villages can grow into complete, all-round individuals and responsible members of society. I would like to emphasize here that we are working with ordinary material. I have described to you the physical, social and economic environment of our children. Our teachers are ordinary district board teachers who have only received a short refresher course of three months. The main thing is that they have started on the four right fundamentals, clean water, food, productive work, and play; and above all an atmosphere of trust. They know they are trusted and they repay us this trust.

I do not say how much we have taught the children of their mother-tongue, history, geography, arithmetic, general science etc. and how we have tried to correlate them. But what I consider to be the most important aspect of this education is that within a brief period of ten months, these little children have grown into responsible citizens not only of the school community but also of the village.

There is one little point I should like to mention. When speaking of the basic syllabus in evolution, I should like to sound a note of warning for all of us who are carrying out private experiments in basic education. For those who fulfil the two necessary conditions, who have faith in the children and who have faith in the method of education through productive work, I would suggest: "Discard the syllabus, and evolve a syllabus of your own." But for those who are not perfectly convinced in the soundness of this scheme, who do

not have perfect faith in the child, I would suggest the safe course of following the syllabus to the very letter.

Sjt. U. S. Tomar, Superintendent, Vidya Mandir Training School, Wardha, *next read a paper on*

A Year of Basic Syllabus at the Practising School of the Vidya Mandir Training School

The Vidya Mandir Training School was started at Wardha on the 21st of April 1938, to train teachers for Vidya Mandirs which were to adopt basic education. For the convenience of the training of teachers the basic syllabus was introduced in the first two grades of the practising school with spinning as the basic craft. The introduction of the syllabus in grade I alone was natural. Hence I base my calculations and observations on the work and achievements of that grade only.

It would take long to describe how the experiment was conducted and carried on. I would, therefore, immediately deal with the results of our one year's experience. And for the sake of clarity I will deal with them subjectwise.

Craft: Craft work, we find, is liked by children. Some get absorbed in their work to the extent of forgetting what is going on around them. But in the beginning they cannot practise it for longer than an hour and a half a day, and we found it desirable to make a moderate beginning and increase the time for craft very gradually.

We were afraid, when we started work, that the wastage would be much and the yarn spun would not be of the required quality. But the results dispelled our fears. The average total production per child, for the year, has been only 6/7th of a seer i.e. only 25% of what is demanded by the syllabus. But there were reasons for this. The average age of the children was only 6; the working days in the year only 57% and the working hours only 33% of those laid down in the syllabus. The speed of production has been very satisfactory. It was 76% of what is required by the syllabus. The shortage of 24% could, I am sure, be easily made up if the children were of 7.

It is very gratifying to note the rate of production this year. Now that we have settled down and now that our teachers have had one year's experience we find that the rate of production for July, August and September this year for class I has been 125% and for class II 169% of what is required by the syllabus. This year's results leave no doubt whatsoever about the possibility of the required production by children. Having realized that, even much more than is necessary could be produced. We now want to try to give to the children that scientific control over spinning to which Sjt. Aryanayakam referred last evening.

Production at a later stage, it is noticed, is affected by the introduction of a variety of spinning methods. Similarly the introduction of spinning with the left hand, after the children have attained some speed with the right, affects the rate of production. Children take delight in creation and always desire to spin more and more. It would, we find, be better if spinning with the left hand is introduced before the children have begun to get satisfaction from spinning with the right, as has been mentioned by Acharya Vinoba in his "Mul Udyog Katne".

Language: There is more of oral and little of reading and writing work to be done in grade I. The Syllabus perhaps aims at intensive and effective oral work in the first half of the first grade. The syllabus, it is found, is easily covered. But the attainment of the required standard within the given time appears difficult to achieve. The unfortunate diversity between the school and home environment and the limited time for which children are at school seem to be great handicaps.

It is felt desirable to introduce reading and writing during the first half of the first grade. Children appear to be keen to start it, parents and teachers too. It would be of mutual advantage if some adjustment in the courses of grades I and II is made.

Arithmetic: No difficulty is experienced in finishing the prescribed course in arithmetic. It is felt that even more could be done. Grade II course is comparatively much heavier and adjustment between the courses of the two grades

appears necessary. But this would only be possible if reading and writing were introduced in grade I at an earlier stage.

General Science: The topics under this subject are not only found to be interesting but are proving to be useful and educative. Children get good and essential general knowledge of things and give evidence of the fact that they are being educated. Difficulties there are but they are for the teachers. They find it difficult, at times, to deal with such natural phenomena as consciously or unconsciously make them drift into their causes and effects. There are many topics under this subject a thorough knowledge of which the teachers themselves do not possess. They, at present, stand in dire need of this knowledge. The syllabus for the training of teachers must take into account this deficiency of the present teachers and include a detailed and thorough study of the topics and subjects prescribed for basic schools. With proper training it should be as easy and interesting for the teacher to open the treasury of Nature as for the children to have a knowledge of its contents.

Social Studies: Being closely related to life and social environment the study of the subject, it is found, forms an interesting and lively part of the day's programme. But the attainment of the standard, at this stage of the experiment, appears difficult. Education in the subject has mainly to be given through properly planned social and civic activities and through the telling of stories. Method plays a greater part in the teaching of this subject than it does in the teaching of General Science. The subjects and the method of teaching being new the teachers are not much helped by their past experience. For want of proper environment difficulties are experienced in arranging the work and carrying it out in accordance with the syllabus. The difficulties of new subject matter and those caused by the absence of text and reference books are also not inconsiderable. But the teachers are, with very hard work on their part, beginning to understand both the subject and the method. And with more and more experience we expect better results.

Method of Correlation: Although not a subject of the syllabus like arithmetic or social study it is the most vital common factor and a reference to it must be made. Our

experience of one year shows that it is difficult for the average primary schoolmaster to grasp the method of correlation contained in Gandhiji's expression "Education through craft." Intelligent teachers who seem to understand it find it difficult to bring it into practice with respect to every topic of each subject that they have to teach. The training school too, devoid of practical experience as it is, has not been able to give them enough detailed guidance in this. It would not be wrong to say that we ourselves depend for it on the practice and experience of the practising school teachers.

This hazy picture of one year's experiment with basic syllabus would neither be correct nor would it do justice to the hard work done by teachers of the Practising School, if the handicaps under which they worked were not mentioned. The circumstances under which we commenced our work were such that it was not possible for us to give these teachers any training. Learning and doing, for them, was more or less, a matter of day to day adjustment. The atmosphere in which the Practising School worked was also not one of peace and non-interference, so essential to any new experiment. Our institution, being perhaps the first experimental institution, was visited by a number of (of course most welcome) visitors whose interest mostly lay in the Practising School. The work in Practising School was also much disturbed by the practical work of the teachers under training.

The syllabus is chiefly meant for rural areas. The Practising School being situated in a town is deprived of the essential village conditions, common home life of the children and proper scope for outdoor work in close contact with society.

Our institution possesses neither a plot for agriculture nor enough ground for gardening—the two important things without which an experiment in basic education syllabus can never be thorough and complete.

On account of all these it was found difficult to give a fair trial to any idea in its entirety.

Our Practising School teachers always wish that they had got a chance to work the syllabus out in a village far

from a town and its complex society. They always dream of a school near a village, by the side of a river with fields, forests and mountains around it, where they could find all the three centres of correlation in their naturality; where the short school time would not bind them but they would be free to mix with and educate children in their private life too; where the life and work of the teachers and the taught would be commonly shared by all, and where they could carry on the great experiment unhampered by a variety of handicaps and disturbances.

For most of you who visited our institution last year this would appear, and rightly too, only a onesided picture. I would, therefore, give the advantageous side of our experiment also. Being at Wardha we were indeed most fortunate to get valuable guidance from the members of the Hindustani Talimi Sangh in general and Sjt. Aryanayakam, Srimati Ashadevi and Acharya Vinoba Bhave in particular. Our experiment owes a great deal to their close co-operation for which our institution is ever so grateful.

I will not be taking due advantage of this distinguished gathering if I did not refer to the conference, as a result of our one year's experience, some of our difficulties and solicit its help. They are as follows:

(1) Opinions differ as to whether it is the basic syllabus which is important and should be faithfully tried or only that which could be correlated with craft should be taught. A decision on this appears most necessary.

I request you to remember that my difficulties are the difficulties of a training school teacher who has to train teachers who are not born teachers and who, if left to themselves, would perhaps do nothing, and whom we have to give a syllabus to teach, and also to train in the methods of teaching them. Every real educationist would want to try something new. But I don't think the scheme can afford this individual freedom at this stage of the experiment.

I personally feel, Sir, if I be allowed to give expression to my feelings, that in whatever we do or consider we must never lose sight of the great aim of our great scheme, that is, developing the whole personality of the child and making

him a good and useful citizen not only of India but of the world. Craft training, Sir, is only a part of the syllabus and properly taught would fulfil only one part, though quite an important part, of our noble aim. The whole syllabus has been worked out by eminent educationists after due thought and consideration. Each topic of the syllabus, if considered thoroughly, would be found to contain seeds of great potentialities. There is no topic in the syllabus, Sir, which, if neglected or left out, would not affect the fulfilment of our aim vitally. Hence with due apologies to those who hold the view that only that which can be correlated with craft should be taught, I say that the syllabus should not be subservient to method but method should suit the syllabus and help the teacher to achieve the desired aim through the proper handling of the syllabus. The syllabus should be tried in its entirety till it is completely tried for seven years at least once. And as much of it may be correlated with craft as is naturally possible.

(2) In the absence of some definite guiding principles of the method of correlation it is found difficult to judge the truth, justice and success of its application. It is, therefore, necessary to work out these principles.

I am conscious of the fact, Sir, that method could never be as concrete as yarn or a winder. It is a thing to be understood. And correlation, about which we have been talking all these months, we understand. But that understanding alone does not seem to be enough. It may be enough for a born teacher who always has an individuality; who has his own particular way of doing things and who not only follows a method but at times even gives something new to the world. But it is certainly not enough for a teacher of a training school or college who has to explain the method, train and guide teachers and judge their practical work. Unless there be some principles to help the training school teacher each would understand it in his own way and train the teachers accordingly. This I am afraid, Sir, would harm the scheme beyond repair. Thoroughness and proper guidance in the beginning appears absolutely necessary.

We have got an idea of the method. But only experience can give it a scientific shape and show its difficulties and

limitations. And as such may I make bold, Sir, to suggest that a meeting of the workers in the field be convened each year to formulate things in the light of their experience? The agenda for detailed discussions be circulated long before the meeting is convened and decisions should be taken. This appears necessary, Sir, because the principles and details of a method can only evolve from facts which we must face.

(3) Opinions again seem to differ on the utilization of the time allotted to craft in the syllabus. Some feel that it should include both craft and correlated studies while others hold that it is meant for craft alone. A decision on this point and on the problems arising out of the decision seem necessary to take.

But a decision on this I think, Sir, would depend on the formulation of the principles of the method of correlation.

There are some more besides these. But I need not trouble you with them. I will, therefore, conclude by thanking you all.

Day-to-day Work in a Practising School

By Mrs. K. Kanetkar, Basic Training School, Loni.

I shall try to give a short account of the day to day work in our practising school, as regards the work of both pupil-teachers and children.

In training institutions a pupil-teacher is ordinarily expected to conduct only one lesson, for one period, under the supervision of his teacher. Usually teachers under training as a class are responsible for this particular subject, some students observing while another conducts the lesson. However, we now arrange to send a pupil teacher to conduct a full half-day session of the school, which may include the teaching of four or five consecutive periods, and is known as the unit of co-ordinated teaching. He is accompanied by only one student observer who is responsible for picking up the thread and continuing the teaching on the following day. Thus, on the assumption that all knowledge is one, we give the pupil-teachers an opportunity of practice in correlating and co-ordinating the work of a full single school session into a complete whole. The basic craft, being a life process,

becomes the starting point and centre of teaching work, and every new item of knowledge which is related essentially to life, is woven round it. Therefore, we have had to change our plan of lesson notes. Previously, pupils prepared their lesson notes in two columns one for subject matter and one for method. Our pupils now prepare theirs with four columns: (a) correlation, sub-divided into the craft and the physical and social environment, (b) subject matter, (c) method, (d) changes in plan made during the lesson (to be filled up after the close of the lesson). A little explanation is necessary. In column (a) the pupil teacher should make every effort to correlate the subject matter with the craft, which we have found to be practicable in about seventy cases out of a hundred, but if this is not possible, recourse must be made to the social or physical environment. No explanation is necessary with regard to columns (b) and (c). In column (d) the teacher records the changes which he has found it necessary to make during the course of the lesson. For instance, if he has planned to deal with a topic in nature study in one particular way and another method is suggested by the children's need, or if he has prepared a story and the children create a situation for poetry, he may even entirely change his lesson. These changes and the reason for them should be entered in column (d).

For work of this type we need a skilful teacher with an ability to rise to the occasion which is usually only developed as a result of experience. However, so far we have had very little experience of this type, for usually teachers under training have to work under artificial conditions and although they sincerely try to give lessons on new lines, they have always to bear in mind the question of the marks to be allotted for their work. Therefore as far as possible they adhere to their original plan.

At the time of instructions we take particular care to see that the teacher plans his lessons on right lines. For instance, if a reading lesson is to follow the craft work, this lesson should proceed from the craft work itself. The revision or recapitulation of one lesson should lead towards the introduction of the next topic. In order that these links may be as natural, smooth, and easy as possible, every lesson

must be carefully thought out and instructed. There is every danger that teachers may make this step artificial, stale and ineffective by slipping into an insipid procedure.

Now let us consider the children's point of view. As we were a little diffident about the possibility of securing the children's interest in sustained craft-work, from the beginning of this term we arranged that every craft period should be followed by another subject such as language, arithmetic or social studies. We were agreeably surprised when our headmaster, who happened to supervise the first day's work personally, said, "I have never been so pleased with the practice teaching as I was today. The children seem to have taken to craft work with great zest and interest." This has continued, and though there may have been one or two instances in which some boys have avoided work these stray cases may be regarded as exceptions which prove the rule.

The school session opens at 11-30 a.m. and 2½ hours are devoted to spinning, alternating periods being alloted to craft and to other subjects of the curriculum. Besides giving ample scope for variety and encouraging sustained interest, this arrangement is also favourable to correlation.

During the 2½ hours of craft work, spinning on the takli is not by any means the only operation to be performed. Slivers must be prepared and cotton ginned or cleaned ready for carding, and the children work at the different processes with great pleasure. Spinning itself involves more than one operation. The children change their postures, spin with the right and left hand alternately, and wind their yarn on to the winder. During the latter process they count the number of rounds and record them on a slip of paper. At the close of the day, they add up the total number of rounds spun for the day. The children thus come naturally to arithmetic without realizing that they are entering into a new subject. It seems a natural sequence of the craft work previously done.

Correlation with the craft is on the whole very easy in the case of arithmetic, but we find it harder with social studies. The work of the latter part of the syllabus in this subject can be done through activity. We take the children to a stream nearby and demonstrate the different processes of cleanliness, which the boys then follow. The children of the

basic classes are mostly responsible for cleanliness of compound and class rooms. The children were divided into groups and their work carefully organized and distributed by the teachers. They enjoy the work and in this way they repaired paths which had been damaged during the rains, cleaned and swept the surroundings of a temple which they visited, and prepared urinals for their own use.

The first half of the social studies syllabus, consisting of stories of the life of men in ancient times and distant lands, presents some difficulties. Sometimes stories are told during craft work and sometimes separate lessons are arranged. One of our teachers wished to tell a story of a primitive hunter and his tools. During discussion the children expressed a wish to sing, and the teacher asked them to sing any song they chose. They began singing शिवाई दादा भी होंईन। शिकारी लाजाईन। (a song about a hunter).

When they had finished the song the teacher took up a discussion about the शिकारी (hunter) in the song and gradually slipped into his story. It was a very impressive lesson.

It is not very difficult to lead the children from craft to mother-tongue composition or reading. Usually we coordinate language with either social studies or general science. Whatever information is imparted to the boys in these subjects is used in the selection and framing of reading matter. As this material is gathered from various sources, the children cannot at present use any text-books and their reading capacity is not up to the mark. However, I am sure that in general knowledge they are considerably in advance of many of us grown-ups. They know much of agriculture and its various processes, and I have learnt many new things from them.

Finally, I want to emphasize that the correlation of all knowledge with the craft will no longer be difficult when the atmosphere of the craft is created in the school. I will give one or two instances. A teacher in the third standard was giving a lesson on upright, horizontal, and inclined lines. The children had been introduced to the idea of a straight line through the takli and the thread. He was explaining these lines by the construction of a cart wheel, with the intersecting spokes forming upright, horizontal or inclined lines. The

children immediately said, "Why not bring a Charkha?" Thus the children very naturally grasped a point of correlation which the teacher missed.

Once, during craft work, a child came to me and said, "My takli is out," using the English word 'out', which has become current coin in Marathi. I did not understand and asked what he meant. "My takli is 'out' just as a motor or bicycle tyre is 'out.'" The spindle was faulty and the rod was not revolving properly, so he had used the word which in his vocabulary described a faulty condition in a cycle or a motor, to describe a faulty condition of his takli. He had understood the analogy.

I could give many such instances. I always find the boys ever ready with fresh information which has been gathered from life itself. I am ever prepared to say that most of our lessons in agriculture and some in general science and social studies were built up by the children themselves. This must be so, for the children live close to nature and so the correlation of knowledge with life is a natural process for them.

Vijay Vidyamandir, An Experiment in Basic Education in the Rajpipla State

By Gopalrao Kulkarni

Avidha is a fairly large village of 2700 inhabitants in Rajpipla, a small state in the Broch district of Gujarat. Shri Mesanlal Vyas of Avidha who is interested in education applied to the State for permission to initiate an experiment in basic education in his village. The State authorities were sympathetic. They handed over the three existing schools in Avidha for the experiment and sanctioned an annual expenditure of Rs. 5700/-.

The three schools were amalgamated under the title of Vijay Vidyamandir and the experiment was started in June 1939. It proved to be a complex problem, for since we had to reorganize the education of an infant class, four Gujarati and five English classes, we had to cope not only with boys and girls of different ages and attainment but also with different educational methods and ideals.

We reorganized the work of the infant class on Montessori lines. We tried to initiate a complete experiment in basic education in the first two Gujarati classes, and in the other classes we introduced the crafts of spinning and carding, gardening and woodwork as compulsory subjects. These crafts were not introduced as basic crafts and no attempt was made at correlating the other subjects with the craft work. The crafts were taught side by side with the other subjects of the syllabus as was done in the national schools of the old type.

We spent nearly Rs. 400/- on craft equipment and started work. As the craft equipment was not sufficient for the number of children, an attempt was made to organize the craft work on the shift system.

In grades I and II where we tried the experiment of basic education, three hours continuously were devoted to correlated craft training. This unit of 80 children was divided into smaller groups. The leader of each group was entrusted with the distribution and collection of craft material, and the three teachers were responsible respectively for the technical, mathematical and social aspect of the craft work. Besides this craft period, some more time was devoted to the teaching of the different subjects according to the time-table given in the report of the Zakir Hussain Committee. The syllabus followed was that of basic national education and an attempt was made to correlate all subjects to the basic craft or to the physical and social environment of the children. I have already placed a short account of our experiment before the Conference in connection with the discussion on the technique of correlated teaching.

We have had to face many difficulties. The new school building was under construction and arrangements for the class-rooms and store-rooms were inadequate. Our teachers lacked training in the principles and method of the new education.

Owing to these difficulties, the productive aspect of craft work has not attained the required standard. The wages of 84 children during the past three months (actual working days 52) has been Rs. 14. This means that the earnings per child during the last three months have been only As. 2-8 ps. but

I hope you will kindly make the necessary allowance for the difficulties we have had to face in initiating the experiment.

In other respects the results of our experiment have been very encouraging. Our work has effected a change of outlook not only in the school children, but also in the guardians and villagers. The attendance has risen and the children come to school happily. The enrolment in the infant class alone has increased from 25 to 100.

This new education has transformed not only the outlook but the entire life of the children. They have begun to appreciate cleanliness. School-work is a thing of joy to them and their relations with the teachers are of the friendliest.

However, our most notable experience has been the children's enthusiasm for craft work. The little children show no signs of fatigue even after three hours of craft work, but this interest and enthusiasm for craft work decreases as one climbs higher up the school ladder. The older students of the English school show a distate for manual work—a sure index of the worthlessness of the present system of education.

One still has to answer many questions and complaints. What will be the result of this spinning? Why do we allow children to dig earth instead of reading books? For the last two months we have been trying to organize meetings in the different parts of the village to explain the aims and ideals of this new experiment in education. We have succeeded to a certain extent in winning over the parents and in creating a more favourable atmosphere for our experiment.

The subject was then thrown open to discussion. The following took part in the discussion:

Sjt. Rajagopalrao, Andhra Jateeya Kalashala, Masulipatam, gave an account of the working of the basic school attached to the Andhra Jateeya Kalashala at Masulipatam. He stated that he had tried to impress on teachers in his school that the syllabus outlined in the basic education programme was only a guide and that it did not need to be followed to the letter. The school was situated in the Andhra Jateeya Kalashala and its pupils were drawn from a neighbouring colony of weavers and basket makers. The weavers were people settled there from outside the district, and they were all anxious to save and get out of the district. Naturally

they wanted their children also to work. All of them, the weavers and the basket makers, were all Harijans. The school worked with two crafts, spinning and cardboard work. They too had started with teaching cleanliness to the children, and they had now succeeded in making the children clean. They had yet to find food and clothing for the children. They gave more importance to the activities than to the subjects, but by means of correlation they were able to follow the syllabus, not closely, but with slight variations here and there.

Sardar Mohindar Singh of Basic School, Jammu, stated that the difficulties connected with a basic school were three: (1) selection of basic crafts, (2) the time-table, (3) the place to be given to the extra curricular activities in the daily programme. In selecting the basic craft, they should take three facts into consideration: (1) that it should be rich in its educational possibilities, (2) that it was in keeping with the local environments, and (3) the space and finance at their disposal. The syllabus prepared by the Zakir Hussain Committee was based on three primary necessities of life: (1) clothing, (2) food, and (3) shelter. They had to consider in each case which of the three should be taken as the basic craft and which subsidiary.

At the Basic School, Jammu, they gave one hour to the basic craft, i.e. the purely mechanical part of it and 40 minutes to the subsidiary crafts, like cardboard, wood work, etc. Opinions differed as to how much time should be devoted to the basic craft. Some of them had felt that they should not tie themselves down to any fixed period. If teachers lay more emphasis on the craft, there was the danger of their exacting factory labour from the boys. If they gave one hour completely to the basic craft, and continued correlation in the other periods on the principles of the project method, it should be enough. As regards extra-curricular activities, they should note that the environments of city children were different from those of village children. The city children were not likely to be interested in the crafts of village people. Therefore, they should provide some scope in their time-table whereby interest in the activity of the curriculum would not slacken.

He would also suggest that in addition to physical and mental training through the basic craft, they should train the aesthetic qualities of the boys through a special programme of music, social service, etc. He would also advocate military drill to be made a part of the scheme. He also approved of the election by the schoolboys of a cabinet of ministers to attend to their everyday activities.

Mr. Panvala, Kathargaon Training School, raised the question of text-books. He stated that with the introduction of the basic system the existing text-books had to be discarded. The question was whether the Wardha system of education could be reconciled with the system of teaching through text-books. Some people believed that in the absence of text-books, it would be very difficult for teachers to do their work. His own opinion was that instead of preparing text-books for boys, they should have text-books for teachers who should be guided in their teaching.

The Conference then adjourned till 6 p.m.

(5) THE PROBLEM OF SUPERVISION AND THE FORMULATION OF STANDARD AND TESTS IN BASIC EDUCATION

Sjt. L. R. Desai, Special Officer for Basic Education, Bombay Presidency, *opened the discussion.*

He said:

Friends, as announced by the president, I have been asked to speak on the problem of the supervision of basic schools. Before I actually describe the way in which this supervision is conducted, I would like to give you an idea of the background of our administrative machinery. I know that the experiment is being tried in different parts of the country, and every division has its own problems. I would like first to discuss the machinery of administration, and then the way in which we have organized our supervision, in order that you can appreciate better and give me helpful suggestions.

We have introduced basic education in compact areas. Since we have four regional languages, Gujarati, Marathi, Kannada and Urdu, we had to select four compact areas, with about 15 to 20 schools in each area. The schools belong to the local authorities, which are ordinarily known as School Boards, and so far as the administration of the school is concerned, there is dual control. The local authorities are responsible for supplying equipment, material and teachers. They also supply buildings and other things. The department bears two-thirds of the cost of the ordinary schools, but so far as the basic schools in compact areas are concerned, the full additional cost, plus two-thirds of the ordinary cost, is borne by Government. Government has also undertaken to train teachers for these schools, so that the teachers in the schools in the compact area are supplied by the boards, but trained by Government. With the introduction of basic education we had to appoint additional teachers because, as you may be aware, many of our schools are what are known as one-teacher schools; some are two-teacher schools and a few are first grade

schools. In one-teacher schools the teacher has to take care of two or three or often more groups of children. In two-teacher schools usually the teacher has to attend to two groups at least, and only in first grade schools we have 'one teacher one class' system. Naturally, when we introduce basic education we have to supply a few additional teachers, and the cost of these additional teachers has been borne by Government. The equipment, i.e. takli, cardboard, cotton etc. are supplied by the district local boards through their administrative officer. It has been a little difficult to supply these things just at the right time. When we introduced basic education in compact areas we did so with the full sympathy and co-operation of those boards. Therefore, naturally we did expect and did get co-operation and sympathy from them. Since the experiment is a new one and the majority of the administrative officers and other people working in the scheme, including myself, were quite ignorant of the requirements, some time was wasted. Therefore it was thought advisable to have proper machinery of supervision so that we could get the best out of the schools and guide the teachers. For every compact area one basic supervisor and one or two craft supervisors have been appointed. The basic supervisor has to attend to these fifteen schools. I know that it is wrong in principle to have such a compartmental system in which the basic supervisor sees to the working of the academic side, (not that he does not know the craft, but he is not an expert in the craft) and the craft supervisor sees to the working of the craft side.

We have been training teachers in the short term course for about 3½ months, but in that time they could not become sufficiently efficient in the craft. Therefore we require some outside help in the form of craft supervisors to improve the craft efficiency of both teachers and children. Thus for every compact area we have one basic supervisor and one or two craft supervisors. The basic supervisor has to visit every school in his compact area once in a fortnight and has to spend a full day in each school. His first duty is to see how much has been done during the previous fortnight. Then he has to give one or two demonstration lessons and he has to plan the work to be taken up in the next fortnight. He

is expected to spend one full day, and, if he happens to spend the night there, he is expected to organize some village contact programme. With the help of the children he may perhaps have a meeting with the villagers where children will do their best to entertain the villagers. Since we have introduced this basic education only in standards 1 and 2 we do not expect much from these children, but attempts are expected to be made and we hope that within the course of the next term we may be able to organize that. The supervisor's work is not just for that day and for that school. He has more to do. During the course of discussion with the teacher, he tries to slove any difficulties which have arisen, but it happens that certain difficulties are not easy of solution. These difficulties he passes on to the training centre. Just as we have these four compact areas, we have also four training centres, which, except in the case of Maharashtra, are just near the compact area. Since Maharashtra is composed at twelve districts, we had to select two small compact areas of about 10 or 11 schools each, and therefore we kept our training centre at a central place Loni about 10 miles from Poona. One of these basic compact areas is in Khandala Peta in the Satara district about 45 miles from Poona and the other in the Perola taluka of Jalgaon, about 150 miles from this place. In Surat District the Katargam training centre is about 15 or 20 miles away from the compact area. In Dharwar the place is just 2 or 3 miles from the first school in the compact area. In Jalgaon where we have our Urdu training centre, we have not yet started a compact area, but when we do so it will be very near the training centre. There are about four or five members on the staff of each training centre and these members discuss the difficulties presented, both among themselves, and whenever there is an occasion to meet the supervisors, or if necessary by post. Solutions at which they arrive are passed on to the basic supervisor, who in his turn passes them on to the schools concerned.

The basic supervisor also collects certain material from the schools in his charge. We have not sufficient suitable literature, particularly reading material, and we have to depend on the efforts of the teachers in the schools and the

members on the staff of the training centres. Our selection, I am happy to say, has been a very good one. Many of our teachers are genuinely enthusiastic about the work and they have begun writing lessons and making other useful things. I agree that these lessons may be crude, and I know that they are not up to the mark, but the teachers have been making honest and sincere efforts. Whatever is composed by these teachers and considered suitable by the basic supervisor is collected and passed on to other schools and to the training centre. We expect the training centre to collect all this material, to sort it out, to improve upon it and by the end of the year, we expect to get some sort of literature for reading.

The basic supervisor is as it were a co-ordinating agency on the educational side. He has also to send a monthly report to me as special officer, so that I get some idea of the progress of the schools and some report from the training centres. Thus I know what is being done in the training centre and in the compact area attached to that training centre.

The craft supervisor has also to visit the schools and spend a day in each school once a fortnight. While he is there he helps the teacher in teaching children. Once the children have taken to takli spinning, the teacher does not find much difficulty, but it is very difficult to make a beginning. Unfortunately in our schools, in spite of our departmental instructions to the contrary, children come to the school at any time of the year. You will find that two or three new children are admitted into the lowest class every month. Thus the teacher has to devote much of his time to teaching these beginners, and the craft supervisor is helpful in this work.

Ordinarily the teachers also are expected to practise craft work. The craft teacher tries to find out whether the teacher has made progress. An enthusiastic teacher would not mind consulting the craft supervisor, but I should not be surprised if some of the teachers dislike to practise the craft and may even have deteriorated since they left the training centre. However, the craft supervisor is expected to help both the teachers and the children in this way.

Moreover the craft supervisor has also to keep a record of the quantitative side of the craft work. He has to collect figures regarding the quantity of cotton or the quantity of slivers used by a particular school. He checks the work done in different periods, in different weeks and sends a monthly report about each school. Thus at the end of the month I get a consolidated statement of the craft work in the compact area. On the educational side I get a statement from the basic supervisor. Now the craft supervisor has also to be in touch with the training centre, because there may be a few points on which he would like to have some guidance from the members on the staff. There is also a heavy responsibility on the craft supervisor in another direction. When we first started this work, we thought that the school boards would be in a position to supply the right material. After a month's experience we found that the right type of material was not supplied simply because the administrative machinery of the boards did not know what type of material was necessary and whether it was available. So the craft supervisor has also to be in constant touch with the administrative officer to guide him as to the sources from which the material can be had cheaply. In fact he practically does the purchasing of craft equipment and raw material in certain compact areas. So, he helps the administrative officer in the supply of material. When I describe all these things to you they sound very well, but I am conscious of the fact that because of the many difficulties and drawbacks we have not been able to place the machinery in proper order. Our object in having frequent visits by the supervisors, both craft and basic, to these schools is just this. We are conducting an experiment. So far as the principles of the experiment or of the scheme itself are concerned, we have accepted them; yet so many details require modifications and changes from time to time, that unless a close watch is kept over these details we shall not be able to know what things require changing, and whether immediately or at a later stage. My attitude in running the scheme is therefore like that of a scientist in a laboratory. I take the basic training centre as a laboratory and the compact area schools as sub-laboratories. In a laboratory we have to check our experiment and keep watch over it practically every

minute, every hour and every day, and since our sub-laboratories have been distributed we have to keep this sort of close watch. Some of you may well say, "There may be efficiency with this supervision but can we expect the same type of supervision over all the schools if the experiment is introduced on a mass scale?" As I have previously said, we are in an experimental stage, and are not trying merely to keep close watch over the schools; we want to discover the drawbacks and suggest modifications. Hence we must have this laboratory attitude, and periodical careful checking up; that is why the machinery may appear costly and elaborate. From the point of view of the department, Government supplies the money and a part of the supervision just as in the case of other training institutions and primary schools.

We have been able to achieve one important point as a result of this machinery. Whatever good we found in one school was introduced into other schools, whatever had found in one school was eliminated. In this manner the working of the schools has been systematized. Secondly, we have to collect some lessons for the reading material. These lessons are improved upon by an expert committee of the Advisory Board, who are also expected to supervise these schools. The lessons received are gone through by the expert committee, and those lessons which are approved of are printed on loose sheets, for we have not yet reached the stage of publishing a book, and no publisher will be willing to publish a book for use in fifteen or twenty schools. This matter will be tried in other schools and if after a further year's experience we find that certain lessons are quite suitable we expect to publish them in book form. The Basic Education Advisory Committee consists of nine or ten members and the member belonging to particular regional area is expected to supervise the work of the basic schools as well as the training centre. They are non-officials and whenever they find time, they go round to these schools, give their suggestions, and help the teachers and the training centres; in this way there is also some outside control. This sort of outside control is quite necessary in the early stages. Of course, that control is advisory. We cannot claim to be experts in any way and when we are in the experimental stage it is good to have

suggestions from non-officials and those that are directly concerned. We have been getting very good help from the members of our Advisory Board.

Now, just a few words about the other part of my subject. There have been put against my name certain things about the formulation of standards and tests. You know that formulating standards and tests is no joke. It requires much laborious work and thoroughly reliable data. The reliable data should come from schools that have worked long enough. The schools have been working for such a short time that I do not think it is possible in any way for us to have any standards or tests. But certainly as time goes on it will be possible to formulate some standards and tests. Although we shall not have any examinations at the end of the year, some tests will have to be devised, but that work will be taken up later on. My suggestion, therefore, is that it would be advisable for the Hindustani Talimi Sangh to appoint a committee who would organize this work on an all-India basis. They may collect material, they may try to find out the level of children after one year, and from that they can devise their tests. Here, I would like to make another suggestion. Even though we are here about 500 and more, and even though very keen interest is seen in the movement as such, the general public has to be convinced about the efficacy of our teaching. They think that because we devote 2 or 3 hours to the craft, the other subjects of the curriculum are bound to be neglected. The only way to convince them will be to get some standards and tests for children of varying ages, taught on the usual lines. We may devise our own tests, or side by side with this work, it will be necessary for the Hindustani Talimi Sangh to get some standards and tests for other schools as well. Of course, that cannot be a comparison. Even though our standards and tests may be reliable people would say "Oh, children in other schools know much better." And unless we have a definite comparative standard, we shall not be able to convince them. My humble suggestion to the Hindustani Talimi Sangh is that they should take up the work in two different directions. In some ordinary schools, run according to the existing system, they should arrive at certain standards as to what may be expected of

children at the age of 7, 8 and 9. The Central Provinces Government have got some standard tests for the children working in the ordinary schools. If the same standards are prepared for use in basic schools that will be a common item of comparison. In the same way for different provinces, and probably for different divisions in each province, we wish to have such duplicate standards and tests. If this work is taken up it will be more effective than any other work in creating public confidence. Now that the basic scheme has been introduced, some provinces may work it quite enthusiastically, others may lag behind; but for creating confidence. I think the important work is to have certain standards and tests.

Mr. G. A. Mukhtar: Basic Training School, Srinagar, said:

Sir, the standard by which pupil teachers have passed in the final test, at training centres, where the first session is already over, may kindly be ascertained in respect of the following:

1. the number of minimum practice lessons;
2. distribution of question papers for the test;
3. criteria for passing in individual papers;
4. the examiners appointed;
5. place given to periodical tests (if held) and individual progress record if maintained in determining the success of teachers under training.

I believe an answer to this question may be expected, in the first place, from those who have already conducted a test examination. In the case of our institution no session has so far been complete. I would request the principal or the headmaster of the Basic Training School at Wardha to let us know what was the nature of the final test in the case of teachers.

Secondly, I would request the speaker who has already given us a very learned talk to illustrate whether by tests in the case of basic schools he means the attainment test or the intelligence test.

Mr. L. R. Desai: I meant the attainment tests particularly to create confidence in the public.

Rao Saheb D. K. Mohoni, Special Officer for Basic Education, C. P. and Berar, said:

I wish to say something about the conditions prevailing in the Central Provinces. There we have to face a different problem from that of the other Provinces, in so far as there are a hundred Vidya Mandirs established in the Central Provinces. Therefore supervision is not restricted to compact areas alone. We have no compact areas. The efficient conduct of supervision is a more difficult problem with us. We have appointed District and Assistant District Inspectors with about 2 or 3 months' training in this scheme. That training was very superficial and we have begun to realize that if we are to have real supervisors, then they will have to be thoroughly trained, at least for 5 months, in order to be able to advise and guide the teachers in a much better way than what the orthodox supervisors have been doing.

There is also another problem which we have to face which is characteristic of the Central Provinces. Primary Education in the Central Provinces is entirely controlled by local bodies, but I am sorry to say that the District Councils are not prepared to supply these schools with craft materials. It is obvious that without the craft material the teachers can do nothing. They cannot demonstrate the craft, and the utility of the whole training is likely to be lost, unless the teachers are supplied with the craft materials. I have had to make several representations to Government saying that the working of the basic syllabus in C. P. will not be efficacious unless the schools are supplied with craft materials and equipment. I am glad to say that as a result of these representations, Government were pleased to sanction a sum of Rs. 8,000 for the 44 schools in the compact area in the Wardha District. Those 44 schools have been created in response to public demand. In the Central Provinces also there is an Officer on special duty with three District Inspectors to assist him.

I am convinced that the basic scheme will not be a success unless the teachers are efficient in craft work. The scheme which I have prepared has been approved by the Hindustani Talimi Sangh as also by the C.P. Government.

Sjt. M. A. Bombavala, District Inspector of Schools, Wardha, said:

I am of the opinion that it is too early to formulate tests with regard to basic education. We have only two years' experience and that also with a small number of schools only. It is therefore not possible to lay down any hard and fast rule for the test to be adopted for the basic syllabus. However, from our little experience we can find some indication of the nature of the test required for the basic syllabus. Formerly the system that was prevalent in other Provinces was in vogue in the Central Provinces. That is to say, the examiner was an external agency, who used to go to a school once in a year and ask about 5 or 6 questions, the answers to which could be found in the text-books. The department thought that that state of affairs was unsatisfactory, and the officer was asked to revise this method of examination.

I do not want to go into details about the method of examination. The basis was that the examination must be of the same type as the teaching. With that object in view the whole system of examination was revised. That is to say, the questions were so framed that they were in consonance with the principles and methods adopted for teaching. That change in the basis had to a certain extent mitigated some of the evils in the examination system, as it existed in the past. The Director of Public Instruction has expressed the opinion that in addition to the new method of examination, we should also take into consideration the record of the work of the individual student during the whole year. As a result of this, promotion depends not only upon what the teacher does on that particular day, but also on the amount of work that the teacher does, and on his record.

With regard to the question of the basic syllabus I think that we should go a step further and instead of holding examinations on any particular day, should judge the merit of the children and of the teacher from the record of the work they have done throughout the year. As regards the agency of examination, I think that the teacher himself was the best person to judge the merit of any particular student, for he comes into daily contact with the children for the major period of the year. Therefore, more reliance should necessarily be placed on the opinion of the teacher concerned.

Shri. Aryanayakam said: I have no desire to take much

time of the Conference, but I want to make one or two observations. I have spent three months in going round the schools and thus have acquired a good deal of experience about their working. When I returned from examining a training centre the staff there expected me to send the usual form of inspection note signed. But I refuse to do that. Whatever I have to say, I say it there and then to the staff. I spend a good deal of time with the staff, discuss points with them, and come home with a clear conscience.

The question of test is a difficult one, and there is bound to be difference of opinion on that question. Whenever I go to a school, I first of all look at the children. If I find that the children there are clean, interested in their lessons, cheerful and alert, I am sure that the school is a very good school. The questions which the teachers ask are a clear index of the trend of their mind.

Another form of test is the one adopted in Shantiniketan. This is the system of periodic exhibitions. The exhibits shown are a clear index of the progress of the class as a whole and also of the individual student. The method of exhibition eliminates competition. I would like to draw the attention of the Conference to the exhibition that is held in the very hall in which we are deliberating, and I hope that the members of the Conference will share my view that the exhibition is an unqualified success. I consider such exhibitions to be the real test of our work, and I hope that by such performances we shall be able to raise the prestige of Indian education in the eyes of the world.

(6) FINDINGS OF THE CONFERENCE

The President said:

Ladies and Gentlemen, my first business this morning is to place before you what in the Agenda is described as the "Findings of the Conference". But I pray for your indulgence and sympathy in this task, because in the course of millions of words, written and spoken, to which we have listened during the last three days, a large number of ideas have been put forward, and I have tried to find out what may be taken as matters on which the opinion of the Conference is, generally speaking, in agreement. I shall read these findings out one by one, and if I do not find any violent indications of disagreement, I shall take it that these proposals may be taken as the proposals of the Conference.

1. The conference realizes that education in India has greatly suffered on account of the very early introduction of English in the course of studies. It also realizes that Indian languages have suffered a great deal as vehicles of instruction, by their not being used as a medium of education, not to speak of the injustice and harm done to the students by forcing them to learn things through a foreign tongue. This conference, therefore, recommends that it should be made a rule that not only in basic schools but in all schools throughout India no English should be taught till the students have acquired a regular education for seven years through their mother-tongue.

This does not apply to those whose mother tongue is English.

2. Basic national education has made steady and encouraging progress during the last two years, and the accounts of experiments and experiences given by official and private workers hold out the hope that it will, in due course, bring about a revolution in the existing system of education in the country.

3. The work of basic national education is of such vital importance to the future of the country that it should be continued without interruption, whatever the political changes that may occur in the near future.

In order to meet the enormous capital and other forms of expenditure which will be incurred in making seven years' basic education free, universal and compulsory, it is the duty of Central Government to bear its due share of the total expenditure on this most important activity of national reconstruction.

4. The minimum duration of the training given to basic school teachers should be one year, and it should be an integral process, not bifurcated into several periods.

5. Every attempt should be made for making the teachers village-minded so that they may sympathetically understand the special problems of village life and strive to deal with them.

6. In provinces where the expansion of basic education proceeds at a rapid pace, with the object of transforming as many of the existing schools as possible into basic schools within a few years, some of the basic schools should be selected for intensive work and teaching organized under controlled experimental conditions, and the results worked out at these should be made available to the rest of the schools.

7. Teachers for rural and urban areas should be trained in the same training institutions and not separately, so that they might develop a common, national outlook.

8. Due emphasis should be placed on the teaching of art in training and basic schools so that it becomes an integral element in craft work.

9. The technique of training for teachers of basic education has yet to be evolved out of practical experience in the different types of basic training schools and colleges.

10. Experience of the last two years' work has demonstrated the fact that it is possible and educationally useful to teach through the correlated technique.

11. This correlation should not, however, be unnecessarily forced, and teaching should be correlated not only to the basic craft but also to the child's physical and social environment, which offer equally rich possibilities for this purpose and enrich the children's basic knowledge profitably.

In order to exploit the full educational possibilities of the scheme, it is necessary to train our general teachers as

craftsmen also; the purpose in view will not be achieved if craftsmen are associated with teachers in the work of the basic schools.

12. In the choice of the basic craft for any school the predominant occupation of the people in the locality should be taken into account, and, in deciding the number of schools centering round each craft in any area, reference should be made to the distribution of various occupations in that locality.

13. In calculating the comparative cost of basic education, we should take into account the fact that it aims at covering the greater part of what is included in our secondary schools at present.

14. In order to form an accurate idea of how far the various products of children's craft work will be marketable, the requirements of the school, the locality, local bodies and the Government should be ascertained and assessed, and this assessment should be used as a guide to the distribution of crafts in the basic schools.

15. It is desirable to have a special supervisor for schools in each compact area in order to supervise and coordinate the day-to-day work of the schools whose number should not be so large as to make effective and frequent supervision impossible. The supervisor should also be in close touch with the training centre, which should work as a laboratory and should prepare detailed schemes of co-ordinated work for various grades. This supervisor should, as far as possible, be a teacher as well as a well-trained craftsman; but, if such a supervisor is not available for the time being, each compact area should have a craft supervisor in addition to the educational supervisor.

These findings having been confirmed by the Conference, the President then continued:

Since that closes the findings of the conference, it remains now for me, ladies and gentlemen, to express on behalf of the organizers of this conference, very great pleasure that the work planned for this conference has been successfully carried out. It has been, personally, a great pleasure for me to find that the delegates who came to attend this conference

from long distances, entered into the execution of their work with earnestness; as I listened to their speeches and their papers from day to day, it appeared to me that they had devoted themselves to a careful study of the problems and difficulties that faced them in their work; and what is more, most of the workers in the cause of basic education came to this conference and approached their work in the true spirit of learners, as people who are desirous of learning through mutual exchange of ideas and experiences. Even the educational experts and administrators who have often been maligned as an inelastic class—not always without reason—even they have shown the same desire to learn and to add to their knowledge about the technique of work of basic education. I am extremely grateful to Acharya J. B. Kripalani for having drawn our attention to the importance of the ideology of the scheme, and I should like to assure him that, so far as I have been able to gain an idea of the spirit in which the workers in the basic education movement are carrying on their activities, they have realized the importance of faith. I do not agree with him that faith in this ideology was absent from these discussions. He may have gained that impression because faith is a thing which cannot be talked about. Faith comes sometimes through inspiration, sometimes in the course of one's work. The workers here have been discussing how to create a better type of citizen, a better type of human being, and they have been attempting to solve the practical difficulties which came in their way. They could not discuss the faith that is in them. May I also suggest that even those who have come to the movement without faith may be converted? Men engaged in sincere and far-reaching activities have found that those who come to scoff remain to pray, and the desire for prayer comes through the educative influence of work that is done by the faithful from day to day.

It has been a matter of greater pleasure to me to find that through this conference we have been able to clarify some of the issues and doubts and difficulties that were pointed out in the course of our discussions. It is true that this conference is not able to place before its members any magic formulae through which we can solve the problems. But rigid

formulae are neither possible nor desirable in our work. Ours is a growing technique, and a great deal will depend now and always on the individual teacher's efforts to find solutions for individual difficulties. I should like to take this opportunity of appealing to all workers in the cause of education to utilize for exchange of ideas the services of the organ of the Hindustani Talimi Sangh, namely the *Nai Talim*. If the workers of basic education do not send to the journal useful accounts of the work they are doing, and the experiments they are carrying out, not only the progress of the paper but also the progress of the movement will suffer. I should assure all workers on behalf of the editors of the journal that all possible efforts will be made to help them.

As I listened to the speeches and the papers that were delivered, one impression came clearly to my mind and I cannot but place it before the Conference for what it is worth. When the scheme was first launched, a large number of educationists and educational workers thought that these schools we were trying to set up would be what they described contemptuously as spinning schools where charkhas would be plied. As I listened to the speeches and accounts of the personal experiments and observations made by the workers, it was borne in upon me again and again, that we are trying to establish schools where not only productive craft work is taught, but where efforts are being made to produce more human, more cultured and more civilized boys and girls. For example, we listened yesterday to the account given by Srimati Asha Devi of the work that is being done at the school at Segaon. I was glad to realize that through these schools we are also attending to those aspects of a child's education such as personal hygiene, food and play which educationists consider always important. We realize not only the importance of class work, but also the importance of providing an environment in which the school can function successfully and flourish. I was also very glad to realize that in these schools an attempt is being made, always without exception, to bring education much nearer to the realities of life and to create a sense of unity with the life of the village. It is not the old method of taking the children round once a week and doing something in order to impress the villagers.

It is rather the adoption of a new attitude of mind which helps these children to study village problems, to bring those problems into the school environments, and then to carry the fruits of their school work to their homes. There is a fruitful intercourse between the school and the home, and the children apply the lessons learnt at school to improve the condition of the village. This is one of the fundamental aims of the new education, to relate education to the soil and the village.

In closing, I should like to express the grateful thanks of the conference, of the delegates and members, to the Government of Bombay for having extended their cordial invitation to us and enabled us to meet at a time when, otherwise, it would not have been possible for us to do, and also for all the arrangements that were made for our convenience and comfort. A large number of local workers and workers associated with the various departments of the Government of Bombay, have been helpful in making this conference a success, and to them also we express our gratitude. I do not want to name them, nor is it possible for me to name them individually. But I do want to express the special thanks of the conference to Mr. L. R. Desai, the Special Officer. Whenever there was a job or work to be done either official or personal, I looked round and saw the tall form of Mr. Desai. He has served as a landmark for the whole area in which the conference was held. He was extremely careful, courteous and polite to all of us, and I feel personally grateful to him for his co-operation. I also want to express the thanks of the conference to the students and the staff of the Training College for the pains they have taken to make this conference a success.

I feel confident, as Mr. John Sargent said yesterday, that this conference will be the precursor of a large number of such conference to be held in subsequent years, and that from year to year we shall be able to report that the movement is gaining in strength and success, as it so richly deserves to do on account of the inspiration derived from Mahatma Gandhi and the devoted labour of a large number of men and women all over the country.

FINDINGS OF THE [illegible]

It [illegible] the [illegible] which [illegible] these [illegible] to bring these [illegible] into the school [illegible] and then to carry the [illegible] of [illegible] work [illegible] There [illegible] between the school and the home, and the [illegible] the [illegible] period [illegible] the conditions [illegible] the [illegible] and the [illegible] village [illegible]

In closing, I should like to express [illegible] of the delegates and [illegible] of the Government [illegible] the [illegible]

[illegible]

Wherever there was a job or work to be done either [illegible] round and [illegible] the [illegible] work for the [illegible] was extremely [illegible] and I feel personally grateful [illegible] co-operation. I also want to express the [illegible] of the conference to the students and the staff of the Training College for the [illegible] they have taken to make the conference [illegible]

[illegible] Mr. John [illegible] and [illegible] a large number of men and women all over the country.

PART II

INTERPRETATIONS OF BASIC EDUCATION

THE IDEOLOGY OF BASIC EDUCATION

Professor K. G. Saiyidain, Director of Education, Kashmir.

Prof. K. G. Saiyidain, said:

I should like to express my thanks to the organizers of the Conference for giving me this very welcome opportunity of speaking on a topic which strikes me as being of very great importance, namely "The Ideology of Basic Education". In the meetings that we have been having at the Conference today and are going to have on subsequent days we are going to thrash out a large number of problems relating to methods, curriculum and technique, and it occurred to me that the ladies and gentlemen, who do not belong to the profession of teaching and are not interested in it from the technical point of view, would certainly be interested in this significant and fundamental problem: what is the ideology that lies behind the scheme that has been drawn up under the guidance of Mahatma Gandhi? And this is a question which appeals to each one of us, not as teachers, but as the citizens of this great country. What is the type of men and women that we want to evolve for the future of this land? What is the type of social order that we want to promote and build up through the education that we impart in our schools? And when I speak of the ideology of the system of education, I am really referring to this intimate and close relationship between the type of individual to be educated and the type of society that we want to evolve. There has been far too much waste and frittering away of valuable energies, because in the process of education we have lost this sense of intimate relationship between the individual and society. We cannot educate our growing generations of boys and girls in a haphazard way, because all education is, fundamentally, socially directed. We have constantly to ask ourselves, what is the type of individual that we want to produce through our educational system, and what is the type of social order in which this

individual man or woman who comes out of our educational institutions would be able to fit in and to contribute richly to it? Therefore this evening, I want to leave altogether the question of the technical implications of the new scheme and to confine myself largely to this important and fundamental question, this vital side of educational reconstruction in which some of the best minds of the country are engaged at present.

The very first thing that occurs to me in this connection is to ask myself: In what way does the approach of this scheme towards the problem of education differ from the approach that historically and traditionally has been adopted in the past? Education, as it has developed in this country during the last 200 years, was largely concerned with evolving a type and system of education that would be suitable for a small section of people. The point has been repeatedly affirmed, and I need not dilate on it at great length, that the system of education that we are trying to replace has been essentially a top-heavy system. We tried to bring the gift of education to the doors of the "classes", hoping, although the hope turned out to be illusory later, that this section of well-to-do people lying in the towns would, in due course, be able to filter down the benefits of education to the masses.

The fundamental departure which the new education makes in this connection is this: that we must try and build our educational structure from the bottom upwards. We have got to study the needs, the conditions, the problems, the sufferings and sorrows of the millions who live in this country, and to ask ourselves: What are their problems that education has got to solve? How can we reorient and redirect and reconstruct our educational system so that the tremendous number of people living in this country will be able to solve their manifold problems? Now, what are their problems? These people are ignorant and illiterate; they have been deprived of the simple elements which constitute reasonable and healthy citizenship: they are poor; they are ill-nourished; they have been deprived of the advantages of sanitation and hygiene; they have not been allowed an access to those simple cultural amenities which, in modern times, are looked upon as the right and privilege of every normal citizen. Therefore, the problem before us is to try and envisage education from

this point of view. And as soon as you look at the problem of education from this angle of vision, two or three things seem perfectly clear. In the first place, if education is to be brought to the doors of the masses, we must try and provide for a much more rapid expansion of the educational system than has been possible up to the present time. It is not a process of slow filtration but a process of growth from the soil, and we must try to bring educational facilities within the reach of every small village. I am perfectly aware that it involves huge financial implications. But if we are at all going to build up any system of education, or any sound social order, then this problem of finance and organization, and buildings etc., will have to be envisaged. It is not for me to suggest the ways and means by which this money is to be found. But the primary duty of any civilized Government in India is to face the problem as other countries have done. Then, it is not merely the question of bringing *any* type of education to the door of the villager. We must try and reconstruct the content, the method and the technique of education in such a way that it would be acceptable and congenial not only to the needs but also to the ideals of the masses. When I think of this point I ask myself: what is the most important and predominant characteristic in the life of the masses? And the answer comes to me without hesitation, '*Work*'. The one single important feature that dominates the life of every tiller of the soil, every craftsman and labourer who lives in this country, is the single fundamental fact of work, or purposeful activity. And when we speak of reorganizing the scheme of basic education in such a way that work of productive activity or craft would be given its due place, we do so for two reasons. In the first place, as all students of psychology will realize, education can be given most naturally and easily and intelligibly through the medium of productive activity, and secondly we realize that the one single activity which dominates human life is productive work. Therefore, if education is to be brought nearer to the conditions in which people live, toil and suffer, it must be based on the bedrock of productive activity.

I am aware that work under certain circumstances becomes a great drag and a drain on the development of the

human personality. When man-made industrial conditions militate against the normal psychological conditions of activity, work becomes a depressing and de-educative factor. But if work is provided in the spirit in which the scheme envisages it, then work becomes a richly contributing factor to the development of the human mind and the human personality. It is not something imposed against the will of the growing individual by a relentless nature outside ourselves, but something for which our own inner nature is constantly craving, something through which we express the most fundamental urges and instincts of our nature. And I ask you: can education be of any use whatever to the growing generation unless it becomes a venue through which they can express their creative and constructive purposes? From that point of view, therefore, it seems perfectly obvious to me that this new ideology of education must provide scope for productive, creative, fruitful and purposeful activity, giving it its real and legitimate place in the scheme of school work.

Another point which has been emphasized very strongly by the Zakir Husain Committee—and it is neither new nor novel nor revolutionary, but something which must be perfectly obvious to all unbiased thinkers—is that during the last few centuries in the development of the history of schooling, we have been placing far too much emphasis on our teaching methods, on our curriculum, on our discipline, on our organization, on the entire programme of our schools, on the spirit of competition and exploitation which can be justified neither on psychological nor ethical grounds, training every individual in the school as if he had to live a life either of an uncivilized brute or to live an entirely self-centred and exclusive life of his own. If education is to become an instrument for the development of better individuals and of a better social order, then you will have to shift this emphasis from exploitation to service, from competition to co-operation, from the desire for annexing as much of the world unto ourselves to giving as much of ourselves to the service of the world as possible. Between these two points of view, there is no possible compromise. As I look upon the problem, it seems to me that there are only two attitudes which you can adopt towards the life for which you are training your pupils.

Do you want to create in them the attitude of what one of the greatest writers of the modern age, Bertrand Russell, has called "possessive happiness"? That is, do you want your children and your pupils to find the meaning and joy of life in gaining as many external possessions for themselves as possible, at the cost of the rights and obligations of others? Or do you want rather to develop in their mind, the desire, the impulse and the inspiration to gain what Russell calls 'creative happiness' which is to be found by losing ourselves in the service of great causes. It is for every single teacher, who teaches either under this system or any other system whatever, to ponder in the solitude of his own mind and spirit as to what answer he is going to give to this question: whether he should look upon himself or his pupil as something which must be stored up for his own purposes, or as something which is to be spent in the service of the great causes for which the noblest souls have always suffered and martyred themselves. I always remember with a thrill the remark that was once made by Bernard Shaw who said that, he would live so fully and intensively that by the time his life came to the end of its appointed course, his powers should be fully used up and he should be merely thrown on the scrap heap, meaning thereby that every ounce of energy and talent given to man must be used for the enrichment of the society and the world to which he belongs. It is this attitude of service, of co-operation, of spurning the desire for exploitation that we want to develop in our pupils. We are living in an age when some of the most important values, which have been cherished by mankind as sacred, have been relentlessly set aside, and any educational ideology that we develop in this or any other country has got to take this point into account. Do we want to build our social, ethical and moral order on the basis of a system of exploitation or on the basis of service? And that to my mind is the real essence of the meaning of non-violence—the spending of oneself in the service of causes that are great and noble.

Then there is another point which also underlies this ideology of the new education as it has been developed by Mahatma Gandhi and the committees that have been dealing with it. We have got to try and create through our education

a sense of true appreciation of all the values cultural, ethical and intellectual, that belong to our country. In other words, we have got to try and develop through our education a sense of true patriotism. I use this adjective advisedly because patriotism is a term which has been abused and misunderstood a great deal both by educationists and by politicians. If you study, for example, the syllabus of Basic National Education, that has been evolved during the last two years, you will find that a great deal of stress has been laid on what are known as "social studies", on the understanding and appreciation by the students of the cultural contribution made by India through various ages to the culture of the world. And unless we can develop in our students a sense of pride and appreciation of all that is good and great in our traditions of the past, we shall not be fulfilling one of our most fundamental duties. But while acknowledging the claims of this type of patriotism, we must also understand that there is a type of patriotism which says, 'My country right or wrong', which looks upon all that has been done by his country as valuable and all that has been done by other countries as something to be neglected. What we want to develop is a twin attitude of appreciation of all that is noble and beautiful, and criticism and denial of all that is ugly or mean. To my mind, true patriotism is just as much appreciative as critical. Therefore on the intellectual side through this basic education we want to develop this critical intellectual faculty, this capacity to be able to analyse the gold from the dross, to be able to distinguish between the significant and the insignificant, the capacity and the moral courage to stand up against our own country and people if they happen to be in the wrong. And I would ask you to consider for yourself what has happened in a large number of Western countries because of the false sense of patriotism that has been instilled mainly through social and educational institutions. The voice of criticism has been hushed and suppression of individuality is common; the right to express one's true self in opposition to the general opinion has not been granted. The result is that all these various forces of exploitation have come into clash and precipitated the world into a great catastrophe. So this new scheme of education that we

want to develop is a scheme that would advocate and cherish the right values of patriotism, but would at the same time be up in arms against anything that is likely to besmirch the fair name and the traditions of this country.

Closely allied to this problem of patriotism is another problem which needs emphasis in the age in which we are living today. India, as we are all aware, and as the other nations are never remiss in pointing out to us, is a country which is inhabited by a large number of people, professing different religions, belonging to different stages of culture, speaking various languages, differing from another in a large number of social and cultural ways. Now this point of difference amongst the people living in this country can be looked upon from two points of view. You can either say: it is a pity that this country, which should have been rich and powerful and free, is fettered for ever by the fact that so many different classes and creeds have been thrown into a pell-mell within this great social crucible. Or, you may say: this is something for which we should be humbly but sincerely thankful. In the diversity of the people of this country runs a thread of unity. Throughout the stream of history there have been flowing currents of culture into our country, not only from the beginning of history but perhaps even before the dawn of history. Many tribes and races have come one after another and made their own distinctive and separate contributions to what we understand the culture of India today to be. If you look upon this problem of diversity from this point of view, then you will realize that India could not be blessed with anything more valuable than the fact that within the geographical entity called India, we have this collection of different linguistic, cultural and religious groups. But this diversity, which from one point of view leads to richness, can also become and has actually become, a source of great conflicts and animosities. One of the most important points therefore that our education of the future will have to face is: what is the attitude that must be developed in our young men and women who are going to live as the citizens of this great land? Through our education we must try and develop what may be described as the attitude of tolerance, the capacity to be able to look dispassionately upon points

of view different from our own, to be able to appreciate what may be good in others, although it may be different from ourselves. And unless we can develop this capacity for tolerance, this capacity of being able to understand and appreciate coolly and dispassionately what is different from us, we shall constantly be setting up in our national life forces whose friction may lead to great disasters. This is not merely the problem of Hindu-Muslim unity. Important as it is, it is a much bigger and wider problem, and to my mind no individual can be looked upon as cultured, or human, or enlightened who does not rise above this level of mere brutish existence and who has not enough strength and liberality of mind to encompass these great differences of culture that we find in our land.

While talking to you about this, I should like particularly to stress the importance both for Hindus and Muslims of studying reverently what cultural contributions have been made by the other community. I find a deplorable amount of ignorance and superstition even in the minds of highly educated Hindus as to the great contribution that has been made by the Muslim culture to India. I often find similar ignorance on the part of highly educated Muslims about the values of Hindu culture. While there are, no doubt, some people who are malicious and are therefore trying actively to bring about mutual frictions and animosities, there is a much larger number of people who have good intentions, who do not want to offend against other people, but through their ignorance, through lack of understanding, through the unsuitable education that has been given to them, they have never been able to understand or see how what we call the Indian culture today is the product of the confluence of so many different streams. Therefore, one of the great objectives of our education of the future will be to revere and study the cultural contributions made by the various races and peoples of this country, so that we shall be able to develop this capacity for tolerance and we shall not believe that the only way in which we can show our attachment to our own religion is by breaking the heads of those who happen to profess a different religion.

There is another point which I may mention in passing.

I think it must be impressed very strongly on the mind of all the boys and girls who pass through our schools that there is a need in life for developing a capacity for hard, strenuous and earnest work. For centuries through our education we have been producing what may be described as a "bourgeois" mentality. We have been producing the type of mind which says, "How can I get rich and get on quickly in the world? What is the secret by which I may be able to put in the minimum amount of work and get the maximum advantage out of it?" In the future of our Indian educational system we do not want to produce a bourgeoisie of this kind. What we want to produce are workers and craftsmen and labourers and people who would believe that they can find the real fulfilment of their life not by shirking work, but by doing it with the greatest amount of persistence and integrity. I am reminded of the story of a carpenter which has been related by Carlyle, who with every single stroke of his hammer, broke all the ten commandments. Now, there has been far too much tendency to develop slipshod habits of work amongst our educated people, so that whenever they undertake a piece of work, they do not put the whole of themselves into its fulfilment. Through our education we must now try and produce workers and labourers and craftsmen who would be worthy not only of their hire, but also of their intellectual and spiritual gifts, and this can only be done if, in our schools, we introduce the element of productive activity which forms one of the most valuable ingredients of the new educational scheme. Imagine for yourselves what would be the effect of this scheme on children who day in and day out, month in and month out, year in and year out are engaged not in learning a number of words the meanings of which they do not fully understand, but in carrying out social and co-operative projects and activities and forms of purposeful endeavour, and learning in the course of this work how to give and take. They will be able to visualize the ends of their activity and plan out the means that are necessary for its achievement; they will have the intelligence to see whether their work has fallen short of the objective aimed at. If you are merely giving theoretical instructions you can always fool yourself with phrases and you can fool your

pupils even more easily. If, on the other hand, your knowledge is to be acquired laboriously through work that has been done by every pupil, through creative activities in which he is engaged, then knowledge becomes definite and clear. He learns through practice what is the most important moral lesson in life, namely, that in co-operative work alone lies human salvation.

Let me now try to crystalize what I have said by pointing out to you the type of individual that we want to evolve. This would be an individual who would look upon himself as an integral part of the rest of society, able to share the joys and sorrows of the rest of his countrymen. We do not desire to cut off the educated class from the masses, dividing them by a breach which grows broader and keeps it entirely out of contact with the rest of humanity. I can assure you that nothing has done greater harm to the development of a proper national culture than this division between the educated and the uneducated classes. So the first great quality of this individual would be a sense of oneness, of unity, of comradeship with the rest of the people who belong to this country, and later on, who belong to the rest of the world. This man would realize that the truest way in which he can make his distinctive contribution to the world is not by exclusive self-centred activity, but through co-operative work, and in this way he will be able to deal with the various problems of a social, economic, political and cultural nature and solve them through common endeavour. He will be duly appreciative of all that is worthy of commendation in his own culture, but he will still have the moral courage to resist any tendencies which are likely to spoil or demean the culture which he cherishes. He will, above all, have the virtue of tolerance, of being able to look upon other points of view with sympathy and feel that he has no right to sit in intolerant judgment over the rest of mankind. And, ultimately, as I said, he would be an individual whose personal attitude to life would be that of an honest labourer. And there is nothing that appeals to me so much in the system of education that has been developed in Soviet Russia, as this idea of developing every individual to realize that he must spend all his talents and energies in productive activity and not be a

drag and parasite on society. He would realize that the work of the world presses as heavily on his own shoulders as on the shoulders of the rest of his fellowmen. If, through our education, we can develop these qualities, if our teachers can keep this ideology before them, I feel perfectly confident that the scheme of basic national education would be a tremendous revolution not only in the educational but also in the social and cultural and moral fields in the life of Indian people. And so far as the teachers and educational workers who are present here are concerned, I should like to appeal to them to keep before themselves constantly the objectives of the new education. There is always the danger when we are engrossed in our daily routine activity, writing letters and reports and filling up registers and working out methods of teaching —that unless we steadily keep before ourselves the goal, we may "lose sight of the wood because of the trees." It is for this reason that I have placed before you briefly my views on the objectives and the ideology of the new education.

A question has been passed to me by one of the members of this audience asking me what relation there is between the scheme of basic education and the doctrine of non-violence. As you are well aware, so far as Mahatma Gandhi is concerned, he says that the whole of the scheme of basic national education is based on truth and non-violence. In his case not only educational but all social, economic and cultural ideas derive their inspiration from that single source. So far as my personal view is concerned, I think it is possible to work the system of basic national education without necessarily giving one's allegiance to the philosophical interpretation of non-violence that has been given by Mahatma Gandhi. There is a sense in which non-violence is entirely acceptable to all religious and creeds and classes of people—in the sense that any objective that is attained through exploitation and selfishness and usurpation of the rights of others is not worthwhile. Whether in certain causes in the political sphere or in the economic sphere violence is or is not justified is a problem about which some of the greatest thinkers in the world have had great divergence of opinion. So far as I am concerned I personally believe that such emergencies may arise where the use of force might be preferable

to the acceptance of untruth and injustice. But this is primarily a philosophical, not an educational problem, and in the scheme of basic national education, there is nothing to which any one could reasonably object on religious or philosophical grounds.

A NOTE OF WARNING

by Acharya J. B. Kripalani

Friends,

Though I have not been present throughout the sittings of the Conference, I have kept myself fairly closely in touch with the standing of basic education. However, the discussions have also shown that certain aspects of the new scheme are not fully understood. You will not therefore mind if I sound a note of dissent and warning.

I said in my inaugural address that the purpose of education is to create the individual in society. Society works at different levels of development. A given system of education trains the average individual to take his proper place at the level to which a particular society has developed. This being so, you will find that whenever there is a great change in society, be it religious, social, economic or political, the system of education consciously or unconsciously changes. If it does not change, the particular revolution that it is sought to bring about is likely to fail. Education tends to be moulded in the light of the revolution that it is sought to work out. Ancient India and China had different systems of education suited to the aims and needs of the two societies. In ancient Greece the education of the Spartans was different from the education of the Athenians, because these two city States wanted to train their citizens for different types of life. One was a military State, and the other was a democratic State: they had their different systems of education. Christianity introduced its own particular system of education suited to the requirements of the individual in the society that Christianity wanted to produce. In the present day there is a revolution in Russia. The Russian system of education is moulded by that revolution, and seeks to educate every citizen to take his proper place in the economic, social and political life of the nation. It therefore follows that every

revolution must have a system of education suited to the new requirements. If it fails to evolve consciously or unconsciously a new system of education, the revolution is likely to fail, for the new recruits that are needed to keep it alive will be wanting. It is always better that the system of education be moulded consciously than unconsciously, for when things are done unconsciously, they take a long time and sometimes they miss the mark.

As a necessary corollary, the educators of the new system must be those who believe in and have understood the aims and objects of the new aims and objects of the new revolution. On the first day of this Conference, we discussed about the training of teachers. The first necessary condition for the training of the teachers for the new scheme is that they must be imbued with the spirit of the change that the new scheme seeks to introduce. It is good that we should have learned people to take upon themselves the task of educating us in the new method; but it is much better that the new ideas be preached by fishermen and other such humble people who have faith, than by the learned who have much cleverness but little faith. If the learned come, if the educationists come, it is good. Our path will be made easy and the speed will be quicker, provided, of course, that they have the missionary zeal of the faithful. Otherwise it is much better to choose humbler people for the work. It is easier for fishermen to become philosophers than for philosophers to acquire the necessary belief. The former are fired with missionary zeal, and whatever may be lacking in their education can be quickly made up. The problem of finding teachers therefore resolves itself to that of finding missionaries for the new revolution.

From this view-point, it is not all to the good that the provincial governments should have come into our hands so soon. Many people who were criticizing us only a few days previous to our acceptance of office, suddenly were converted to a belief in basic education. They came to be officially interested in it.

Our Education Department suffers from a major defect, which nobody who knows anything about education here could have failed to observe. This department is organized

on the model of other executive departments of Government. Like other departments it has a hierarchy of officials vertically arranged. Now in education one teacher should be as respectable as another: a teacher who educates the child, if he does it well, is as good as the professor working in the university. There should be no great differences. But unfortunately in our education department, designed as it is on the model of other executive departments, we have a great deal of difference. This educational hierarcly cannot be very helpful to new schemes of reform. It will be as nervous of change as any other department. If owing to a change in Government policy, the department is obliged to trim its sails to the political wind, it will do so grudgingly and reluctantly. The zeal and enthusiasm that alone can ensure the successful working of a difficult plan will be wanting. We have therefore to walk warily. I would therefore discount any scheme that works for mass production in basic education. Mass production may appear imposing but its product is likely to be misty, flimsy and inartistic. As we have to carry on this education through crafts and through village industries, let us not proceed in the spirit of factory production.

From the most ancient times, the work of the teacher has been considered most sacred. In India there were certain things that were never meant to be sold. One of these was knowledge. There was no difference between spiritual and mundane knowledge: all knowledge was sacred. You could attain the highest good even by a knowledge of logic and grammar: it was all to loosen the bounds of ignorance. Therefore selling knowledge was on a par with selling religion, and was prohibited. Another thing that could not be sold was the doctor's skill. To this day it is believed that a medicine loses its efficacy if fees are charged for it. Not that the doctors and teachers could live without material things. People knew that they had to live as any other social workers have to. In ancient India they not only lived but were respected. All that was expected of them was that they should think in higher terms than those of mere bread and butter. Every worker is worthy of his wage, and that wage he gets all right. In Europe too, you will find that the teacher is distinguished from workers in other departments;

his standard of living is more modest and plain. Throughout the ages the greatest teachers have been indifferent about their person, their surroundings, even their families. The new teacher in India must live up to the traditions. How much more so must he do this if he is to make a success of the new plan? This missionary zeal cannot be generated officially.

It is therefore no matter for surprise that during the discussions in the last few days it should have been revealed that many of us have not fully grasped all the requirements of the new scheme. We have not understood what exactly is required of us. Remember that the idea underlying basic education is not quite a new idea. It has been tried in other countries but mostly it has failed. It has not solved the problem that it was meant to solve there. We must study the causes of this failure.

In India, we have to solve two problems. First we have to create a new polity, a new citizenship, a new life and a new order of things. This is one thing. The other thing is, that we have to make education universal. In Europe, you will find that the new systems of education based upon reality, labour and craft work have made education costly and therefore they had to be abandoned for the generality of the people. Whether it is the Dalton plan or the Montessori system, they cannot be universalized. If we follow these systems and confound our method with them, we are in for failure. I know some educationists have revised their books on the history of education and have come to realize some merit in what the old man says. I am afraid that if they do not understand the full implications of his scheme, our experiment will fail, more so in India than in Europe and America, where an average parent of the middle classes can afford to spend much more on his children's education than we can in India. Therefore, we have to be careful about the produce of the work. We cannot afford to produce things that may lie on our hands unutilized or unsold. We must remember that orthodox education is the cheapest education that can be devised. It cannot be made cheaper than that. If therefore we are going to employ the Western methods, we shall only succeed in making our education very dear. The

cost will be prohibitive. We shall have ultimately to abandon it. After all, our socialist friends are not far wrong when they emphasize the economic aspect of things. It is something which we have to consider. If the work done in the school is not carefully and meticulously done, and if the teacher fails to keep the proper records and neglects the value question there is a fear that our experiment may not succeed. Beautiful as the exhibition is, the work has been produced more to impress the spectators than with regard to its economic value.

These are the two ideas I proposed to place before you for your consideration. The first is that the teacher must be imbued with the spirit of the author of this scheme and must possess missionary zeal, and the second is the value question. To be imbued with the spirit of the author of the scheme does not need a very great strain upon one's intelligence. After all, what does Mahatma Gandhi stand for? He stands for Truth and Non-violence. These are his two great fads. Everything else is secondary. If these two principles are kept in view the rest does not matter. Of course, truth and non-violence have to be canalized, institutionalized and put in some sort of system. That will naturally bring a little rigidity but so far as Gandhiji is concerned his mind is ever flexible. With the war upon us it should not be very difficult to appreciate these two principles of truth and non-violence. Today more than ever it is very plain that there can be no peace in the world based upon untruth and violence. It is plain that even for a good cause today violence is not the solution. We must not forget that in the course of history we find that certain institutions cease to be of value after some time. The good has flown out of them. War did create civilization; war was the author of many things; war pushed humanity forward, but today even for the best cause war is no solution. At such a time it is rather curious that people should place their faith in war and violence. Group life is a very strange phenomenon. Ask individuals whether non-violence is not better than violence for the solution of any problem, and the answer will be, 'Yes, non-violence is better than violence.' But put these very same individuals in a group or a nation and the answer will be that war is necessary

and good. This is the difference between the individual mind and the group mind. The individual mind is more civilized than the group mind. When individuals group themselves together, virtue seems to go out of them and they become violent. What Gandhiji wants is that the group life should be as intelligent and as civilized as individual minds, that society should be as non-violent as ordinary individuals are. There should be no two standards of conduct, one for the individual and the other for the group. This is all that Gandhiji demands of us. Considering what war means today it should not be difficult to appreciate the stand he takes.

These are some of the few ideas that have occurred to me while I have been following the proceedings of the Conference. I have placed them before you for your consideration.

HOW A SCIENTIST LOOKS AT BASIC EDUCATION

(*A lecture delivered at the Conference by Prof. N. R. Dhar, Deputy Director of Public Instruction, U.P.*)

Dr. I. R. Khan: Ladies and Gentlemen, Dr. Nil Ratan Dhar is going to speak to us tonight on "How a Scientist looks at Basic Education". Dr. N. R. Dhar is very well known indeed in the world of science. He is an eminent chemist of international reputation. Perhaps, many of you would say—I would say the same thing—that basic education and an eminent scientist may have no relationship whatsoever, and a scientist cannot speak with authority on the subject of basic education. Dr. Dhar is also the Deputy Director of Public Instruction in the United Provinces, and he is in charge of primary education. Therefore, he combines in himself both the requirements. You will therefore agree with me that no one, who is more competent for handling a subject like the one which we have tonight, could have been available for this talk. I will now call upon Dr. Dhar to give his talk.

Dr. N. R. Dhar: Ladies and Gentlemen, during the last war I happened to be in Europe. In last two years of the war, I lived in France and was in Paris when the armistice was signed, and heard President Wilson's lecture on his Fourteen Points. He was then in Paris—a small man with a nasal accent. I was at Paris when the Treaty of Versailles was signed. That was a time of great catastrophe to France when the Germans were holding a good part of the beautiful French soil in possession. At that time an incident took place which made a deep mark on me. There is a big newspaper called the "Petit Parisien"; in English it would be "Small Frenchman". This paper had a huge circulation, and in the time of the war, in 1917, the editor of this newspaper wanted to find out who was the greatest Frenchman that ever lived. So he requested the subscribers of the newspaper to name the greatest Frenchman according to them. When the

votes were counted, to my great surprise and joy (I thought that as it was in the time of war they would perhaps name some great soldier, I found that Louis Pasteur the scientist got the largest number of votes. This clearly illustrates how the human mind works even in times of great catastrophe. Now, what had Louis Pasteur done to earn this unique honour? He helped suffering humanity most by his research. Due to this great man, we now know the cause of disease, how disease has come. Pasteur found out that most diseases are caused by small animalcules known as germs, and that if the germ is killed a patient is cured of his disease. That was the great discovery he made. On account of Pasteur's work surgical operations and so many other medical things are now done more quickly and with greater ease because of the use of antiseptics against germs advocated by Pasteur and practised by Lord Lister.

Louis Pasteur was a poor tanner's son. He was very hard-working; he used to get up at four o'clock in the morning, and he used to work right up till ten o'clock at night. He was always in his laboratory. On the day of his wedding he had to be reminded by his mother that he had to go to church to get married. Such was his devotion to science. This man helped humanity most and so even in the throes of the greatest war his countrymen proclaimed the greatest Frenchman that ever lived. After him came Victor Hugo, the master writer, and then Napoleon Bonaparte, the greatest of soldiers!

It has occurred to me pretty frequently that we might take votes in our country as to who is the greatest Indian. While there may be a difference of opinion, Mahatma Gandhi may be bracketed with Gautama Budha. I do not know exactly, but that is what I feel. Perhaps, one of these two great Indians will score over the other but I think they are the two greatest sons India has produced. What has Mahatmaji done? He has given India a great national status in the eyes of the world. I have lived several years of my life in European countries, and I know that the status of this country has increased very much since the work of Mahatma Gandhi during the last twenty years. When we were in Sweden in 1937 many people asked my wife and myself,

"What is Gandhi doing? Why can he not free India from the yoke of the British?" In Switzerland also we met many people and they said, "We are awfully interested in the philosophy of Gandhi; we want to take it up." In Italy also we met many officers who told us that Gandhi has done as much for India as Mussolini has for the Italians. In this way, we realized that Mahatma's work was being appreciated all over the world, and it is due to him that not only are we not now looked upon as savages, but we have acquired some national status.

To my mind, the greatest work that Mahatma has done for us is the elevation of the masses, and for all times he will be respected and revered not only by us but by people of other countries also.

We scientists are more or less practical men. My friend Dr. Khan has also devoted thirty years to chemistry. We are bottle washers. Above all, Mahatmaji is eminently a practical saint, and this outlook of his is more than welcome to our country. I do not know much of our history, but I know this, that after Gautama Budha's time a lot of scientific work was done and surgical operations too were quite frequent. The making of high-class steel was first carried on in this country. I remember in 1917 a very eminent French scientist, Le Chatelier, declared that the steel of Kutub Minar is more or less pure iron, and this quality of steel is not forged in Europe even now. Our forefathers knew a great deal about mercury and iron salts and their uses in medicine, and these things were used very much earlier in this land than in Europe. But something happened—reaction set in—and we began to grow content and shut our eyes to active work. Although there is still a lot of philosophy in this country, yet that does not lead to any practical results; it does not lead to national improvement. We have become bookworms and thinkers. But Mahatmaji has given a practical lead by introducing craft into our system of education. We scientists welcome this because we know that the basis of craft at the present moment should be science, and whatever may be the craft, whether it is takli, or spinning or cardboard making, that it is welcome to us. We have to develop this gradually. Due to Mahatma Gandhi's genius, not only will crafts develop,

but also practical science and applied science, and that is why we welcome this suggestion of Mahatma Gandhi. I have been listening to the discussions of this conference and I think we have realized that we can work out the scheme. We must improve the methods, keeping the basic principle in view and for that purpose, I feel, it would be worth while if some small expert committees were appointed. They will discuss the question of syllabus in greater detail, and write suitable text-books. Eminent educationists as also experts and specialists in these lines may be invited to cooperate with these committees and in this way we should develop these ideas and have suitable books; because the future progress in schools especially of the higher classes will depend on having suitable books.

As Acharya Kripalani pointed out in his presidential speech, there are some defects in the old system of education in which many of us have been brought up. The first defect is that this education is devoid of a national bias. Because we are slaves, the love of our motherland is considered by the governing class to be a sin. However, I find that the times are fast changing, and soon it will not be considered a crime to work for the good of and love our motherland. The courses in civics and social studies will also remedy this defect. Upto now, the course of education in our schools was bookish and theoretical. Now things will improve with the introduction of suitable crafts. Then the third thing was the lack of general science. Even Earl Balfour, a great writer and statesman, had to declare that most human happiness and progress is due to science and its application. It is in the fitness of things and seems natural, that children, as far as possible, should get a scientific training from the very beginning, and I should like to tell you that it is not costly. We should really attempt to give at least the rudiments of science in our popular language. So, my humble request to the teachers in basic schools and basic colleges is that they should see that in all educational activities a more scientific basis is adopted.

I am glad to see that agriculture is treated as a craft in the basic education system. The problem of improving Indian agriculture has not been adequately tackled even in

the best parts of the Punjab and the United Provinces, where wheat production in irrigated soil is only eight to ten maunds per acre, whilst in Belgium and in the United States of America it is about twentysix maunds per acre. Similarly, sugarcane production in India is one seventh of that in Java or Havaii. I know that this question of the improvement of Indian agriculture has now been taken up by experts, and I hope that efforts will be made by which our boys and girls in rural areas may know the science of agriculture and also how to apply it. The Indian cultivator is a very practical man. Every European acknowledges that, and now if he knows the science of agriculture, he will surely produce better crops.

Another important matter connected with this question of agriculture is that of our waste and usar (alkaline) lands. In the United Provinces alone we have five million acres of waste land. It is of such a type that nothing can be made to grow there. So that land has to be improved and crops produced on it. Unfortunately, this land of ours contains far too many people and naturally the land under cultivation per head is exceedingly small. Therefore, we are underfed, ill-nourished. In the United States of America, roughly three acres of land, cultivable land, is available per head; in France, it is about 2.6 acres. But in this country it is only 3/4 of an acre, and it is no wonder that the population of India is half nourished. Again, we possess the largest number of inefficient cattle also. We must restrict our population as is done elsewhere. I have not had the pleasure of discussing this matter with Mahatmaji, but I have discussed it frequently with Pandit Jawaharlal. The object of basic education is really to make healthy, useful citizens. We must realize that one of the greatest problems that we have to solve is this population problem. We have to consider whether we should go on multiplying, or whether we should cry halt. In 1931 we were 36 crores, and the census people, who have gone a little deeply into the matter, say that it may now be about 40 crores, or a little more. Our motherland is unable to produce as much as is necessary to feed these hungry mouths. Even with a better crop production, I am afraid we would never be able to reach the European standard or the American standard. Unless sufficient food is there, we cannot be healthy.

We are also too poor to purchase food from outside. We have therefore to consider very seriously whether we should not stop increasing our population.

Coming now to the question of food, I must say that *gud* is better than sugar; of course, honey is best. Food, as you know, is a very vital thing, and to keep us healthy good quality food must be available. I think it is high time that the scientist, the educationist, the doctor, all of them sit together and work out a basic national diet. Our greatest crime is that we are poor, but we must put our heads together and find out a national diet which is economical as well as health-giving and nourishing. Amongst us diet varies because it depends on the crop that is easily available. But all the same, we can work out a formula and apply tests to it from the physiological and the scientific points of view. In this respect also Mahatmaji has taken a lead. Dr. Jivraj Mehta, who is my friend, has discussed these things frequently with Mahatmaji. Therefore, I wish that all our young men and women who are getting this basic education, or any education for the matter of that, should know the proper value of diet, and should also know what is good food and what is bad food, and I request all the workers to see that this becomes a part of our national educational programme.

I want to show a few simple experiments. Egg is one of the most important and nourshing foods. In this respect our Muslim friends are correct and I must say that we Hindus are wrong. The egg is a vegetable.

The oxygen that we have around in the air is not pure. Things burn very brilliantly in oxygen. (*Shows this by experiment. Takes a glowing taper and puts it in a jar containing oxygen; the taper burns brightly. Takes sugar in a jar; adds water to it; puts sulphuric acid* (*concentrated*) *in it. Sugar chars so that the substance is nothing but charcoal.*) When you eat sugar or *gud* you turn it into carbon dioxide utlimately.

Carbon *plus* chemically combined water is carbohydrate, the active principle of rice, chapati, sugar etc. Carbon is a common constituent in all food. Carbon gives us energy for work, and the basic principle is that all food materials must

contain this carbon. If you take sugar it begins to burn in our body with the help of oxygen.

I am now taking tartaric acid and adding to it a substance rich in oxygen-hydrogen peroxide. There is no chemical change. But if some iron salt is added vigorous evolution of gas takes place.

Tartaric acid *plus* hydrogen peroxide *plus* iron salt, this is like the natural phenomenon which is taking place in every human being. The blood in every one is the same and contains amongst other things iron compounds helping oxidation. A Chitpavan has no blue blood; it is the same as that of the Muslim, the Chamar or the Kayastha. There is no blue blood in kings and queens: it is all ordinary blood like mine or any other person's. The vanity of high class men and women that theirs is blue blood is all false. When I stir this mixture, I am reminded of Michael Faraday, who was a blacksmith's son working as a bookbinder's assistant. He was wedded to a silversmith's daughter. Afterwards, he was working in the laboratory of Sir Humphrey Davy. Faraday was asked by Sir Humphrey to stir a thing like this. One afternoon Sir Humphrey said, "I am going for my meal, and shall come back in an hour's time." He had his meal, but forgot to come down. Next morning he went to the laboratory and to his surprise he found Faraday stirring the same thing in the same way. This shows Faraday's intense devotion to his work. Later on, Faraday made wonderful scientific discoveries, and although many people asked him to patent them so as to make a fortune, he sternly refused to do so. Such is his noble example.

I am also here reminded of our great scientist, Sir Jagadishchandra Bose. He has also made wonderful discoveries, and we all know that he discovered that plants have life.

Now I will revert back to our food problem. People who eat rice are found to be mentally alert and more intelligent. Rice is chiefly carbo-hydrate, but it contains protein, a material richly contained in eggs. Protein is suitable for brain work. It has been proved that those people whose staple food is wheat, are not so mentally alert and intelligent, but they are physically stronger than rice-eaters. Therefore, we must have a mixture of chapati and rice. We must also take

leafy vegetables abundantly, for they contain iron salts and vitamins. Tomato is also a substance which is rich in almost all vitamins. When we were in England as pupils we were told, "An apple a day keeps the doctor away." Now, we can aptly say, "A tomoto a day keeps the doctor away." We may add a little salt to tomato and include it in our daily diet. It is really a good food. Milk is also a very rich food, and should be included in our everyday diet. The point which I meant to bring out is that we should have a national diet. If we sit together and discuss it, we can devise that. A proper knowledge of dietary is of very great use not only to our young men, but also to our young women so that they may cook the right materials and rightly.

Another thing to which I may perhaps make a brief reference in passing is that inter-caste and interprovincial marriages are an absolute necessity for our national growth. Mahatmaji has taken a lead in this matter also, marrying his son to a Madrasi brahmin girl, and I have no doubt that the couple is quite happy. So, we must encourage inter-marriages, and make our boys and girls think in a national way, and inculcate in them not only national and scientific ideas, but also socialistic ideas.

Now, I shall perform a small experiment.

(*Breaks the egg, puts the yellow portion in a jar and the fluid substance in another jar. The watery substance becomes white when treated with hydrochloric acid just as if it is boiled. Some acid is put in the yellow substance too, whereupon its mobility too is lost : it also hardens.*)

Ladies and Gentlemen, I thank you very much for giving me this opportunity of speaking to you.

A member of the audience asked: If there is life in the egg, is it proper to kill it? Is it according to the principle of non-violence?

Dr. N. R. Dhar: Our greatest scientist, Sir Jagadish Bose has established that there is life in plants, in vegetables. The questioner, I think, eats vegetable. So, he is violent.

Shree Bharatanandji: Cannot some research work be done, as it is done in other countries, and our land improved and the bad soil turned into good soil? I am specially interested in the subject because I live in a place where there

is plenty of alkaline earth and miles and miles are being wasted.

Dr. N. R. Dhar: I have devoted about twenty years of my life to solving this problem, and I am getting useful results with molasses and press mud, which are bye-products of the sugar industry. India is now producing about 900,000 tons of sugar and 600,000 tons of molasses and about 300,000 tons of press mud. We are self-sufficient. Molasses and press mud can easily reclaim alkali land.

A lady member asked whether, as she understood the lecturer to say, India was unable to produce sufficient food for the people. She believed that India being a very vast country, possessed rich resources, and would be able to supply sufficient food even if the population continued to increase.

Dr. N. R. Dhar: I repeat what I stated. Our population is being greatly multiplied. The average land under cultivation per head is only 0.75 acre as against 2.6 acres in France and 2.3 acres in U.S.A. I have no doubt that even with all the resources of science, it would not be sufficient to supply an adequate quantity of food to our people. I have no hesitation in saying that we must restrict our population.

I thank you all once again.

AN EDUCATIONIST LOOKS AT BASIC EDUCATION

Mr. John Sargent, (Educational Commissioner with the Government of India) said:

Mr. President, Ladies and Gentlemen, I came to this conference merely to listen and learn, not to speak. Even if I had wished to take part in the previous discussions to which I have listened, I am afraid my knowledge of Hindustani is so very far from perfect, and those people who used that language either spoke so eloquently or so fast, or both, that it was quite impossible for me to understand a good deal of what they said. In spite of that I feel that I really ought to take advantage of your kind invitation to say a few words, if only to thank you for giving me an opportunity of being present at this meeting and, if I may, to congratulate all those responsible for the organization of this first Basic Education Conference and Exhibition on the success of their efforts. I trust that this may be the first of many such conferences. I also think that one of these days some of us who are present at this meeting will look back on it as rather a historic day in the story of education in India, a day on which the first shots were fired in a new campaign, a campaign in which whatever we may think about other contemporary campaigns we shall probably be united and one which we are all determined to win, and that is the struggle to bring the benefits of free education sooner or later—I hope sooner rather than later to every child in India.

Now, Sir, I am afraid that I cannot make a contribution to the subject of this afternoon's discussion. I have seen a number of experiments on basic education, but I have made none myself. But if I may for a moment travel outside the particular topic of "Experiments on Basic Education," and if I may speak not as the Educational Commissioner with the Government of India, but as a colleague with you in the service of education, as an individual as keenly interested as

any of you in the success of this great experiment of yours, there are two or three things which I should like to say. In that very thoughtful and attractive address with which Acharya Kripalani opened our meeting, he urged upon us the importance of starting from simple and concrete things and warned us against being led away from this path by what is abstract or artificial. And in that spirit, I have been glad to see, you have devoted a considerable proportion of your time to considering the really practical and fundamental issues.

The first is the question of the provision of the adequate staff of competent well-trained teachers to make the basic education scheme a success. It is of course a platitude for me to say that no system of education, however wisely inspired, however carefully controlled, however liberally financed, is going to achieve any kind of success unless you have a body of teachers who both believe in it and are willing to do their utmost for it. I have always thought, since I first read the scheme nearly two years ago and I am glad to see from speeches made in this conference, that you too fully recognize this, that the scheme of basic education is going to make demands on the enthusiasm and initiative of the teacher to an extent that no other system of education in any country has ever done before. I can tell you from my own experience in other places, that there are, fortunately, in the ranks of the teaching service, people who would make a success of any teaching scheme, who would take any craft as a basis of the school activities and correlate the whole curriculum with it. There are hundreds of pioneers and enthusiasts in India capable of doing this thing and I may say so without any idea of flattery—many of them will be found in this audience. But the scheme has to be worked not only by the select few, but by the hundred per cent of teachers employed in this country. I think no teacher who takes pride in his profession—I would sooner say in his vocation— will overlook the fact that, to give full effect to this great plan the utmost of his powers must be freely given to the task. That is one thing.

May I also suggest that in the beginning of a great experiment of this kind, we should again recall Acharya Kripalani's warning to stick to concrete things, should not allow ourselves to be unduly impressed by the word "correlation."

I am the last person in the world not to appreciate the importance of correlation. In my own country for twelve or fifteen years I worked to try to bring home to teachers in the junior primary schools and senior primary schools, which correspond roughly to your basic schools, the importance of correlating the subjects taught with some basic craft. But do not let correlation become a shibboleth. If you cannot correlate all subjects or you do not believe that complete correlation is suited to your circumstances, do not hesitate to start work on a less ambitious plan, or pause for a while and let the problem of correlation work out its own solution. Education, in my opinion, is not a jigsaw puzzle into which all the pieces will fit in naturally and completely, so that you can at any stage get a complete picture; and it would entirely destroy my faith in the ultimate value of this new experiment if during the experimental period my collegues in the schools do not sometimes come to me and say: "Here is the picture as we have made it to the best of our ability, but as you see, here is a loose, and here a rough edge and there a jagged corner; but we shall in the fulness of time and as the result of experience perfect the picture before we have done." Do not be discouraged if your correlation is not yet as complete as perhaps you would like to make it or as your model scheme tells you it may be made. Keep the ideal before you, but do not be disappointed if loose ends, jagged corners and rough edges appear.

There is another point perhaps which I might touch on with regard to the question of teachers. Here, again, I believe that teaching is a vocation and that the primary purpose which takes a man into the teaching profession is the wish to teach, the desire to render service to the community in that particular form. But I also believe as a practical man, that the teacher, both in his own interest and in the interest of the State he serves, ought to be adequately paid. No man, either in England or in any other country, has ever entered, or I hope ever will enter, the teaching profession because he wants to become a rich man. I remember in England, a few years ago, some excitement was caused by a heading in a newspaper "Rich Teacher Dies". Everybody read it with much interest. It

appeared that the teacher in question had left not less than £ 30,000. But it turned out on further investigation that of that sum, £ 500 alone had been saved by him out of his earnings as a teacher, and the remaining £ 29,500 had been left to him by a rich relation. I do feel, and I hope you will agree with me, that if a teacher is to give devotion, initiative and enthusiasm, to render the wholehearted service that the success of the scheme demands, he ought to be able to come to school in the morning without any worry in his mind about the domestic cares he has left behind. That postulates an adequate, or at the least a living wage.

The second practical issue derives very much from this and that is the question of the way to finance the great experiment. That will, of course, depend very much on the question of salaries. As you know, the teacher's salary is the determining factor in the cost of all forms of education. I am as hopeful, I am sure as anybody in this room, that this experiment on which we are embarking will fulfil one of its objects, and that the sale of school products will be found, to some extent at any rate, to cover part of the expenditure that its carrying on may require. The only thing that caused me some concern when I first came across the Wardha scheme was the suggestion that the schools should or could be made entirely self-supporting. I have had some experience of trying to do that on a limited scale in another country, and my experience makes me think that the attempt to do so is not only uneducational but can never be thoroughly successful. That does not mean that we should not aim at getting as much out of the products of the school as we can. I have heard with relief from the President, and from another friend who has had a great part in the formulation of the scheme, that this is no longer regarded as one of its essential principles. I know also that this is a poor country: I have been long enough here to realize that. At the same time, I cannot help feeling that the provision of a soundly conceived education is the best means of arming both the human body and the human spirit for what is bound to be a life-long struggle. So far indeed as the spirit is concerned, many religions inculcate that the struggle will continue long after it has parted company with the body. That being so, I think we must labour to per-

suade people that money spent on this mental armament is as essential as money spent on much more ephemeral armaments. I am not going to give up my optimism that if money is required to finance a scheme of this kind, it will be forthcoming even in a country admittedly poor like India.

The third and the last thing I am going to say is that—perhaps because I am getting an old man—I attach some importance to the question of speed in translating our ideals into practice. When I first came to India, a friend of mine who had been many years in this country told me that many people in India regard action as a bad thing. All the same I shall still regard conferences and discussions and reports as a prelude and not as an alternative to action. We are presumably talking about this scheme because we want something to come of it, because we want things to happen all over India like the things we have been told about at this meeting. We are going to go away from the meeting determined to see that such things do happen. As the world is moving at a tremendously rapid speed, and as some of us are not as young as we should like to be, I am one of those who want to see them happening soon. For that reason. I am very grateful that this movement has behind it the impulse of a great man, a man whose word is as powerful a motive force as that of any living man. His efforts aided by our efforts will, I trust, bring this cause to the fruition we desire. It is because of that, that I believe, that within a reasonable period we shall see the length and breadth of this country covered with schools, not schools run for the profit of those who exploit children, nor cramming institutions whose sole object is to enable people to pass examinations, but real schools where children can work and play, and be happy. It is because I think that in this basic education movement there lies the germ of that hope, a seed which, if carefully tended by people who put education at the head of all the social services, will become a splendid tree, that even though I do not very much like standing up and speaking, I am very glad to have the opportunity of addressing this conference and speaking a word or two this afternoon. (Applause).

IMPRESSIONS OF THE CONFERENCE

Rev. and Mrs. A. E. Harper, Training School for Village Teachers, Moga, Punjab.

Attendance at the First All India Basic Education Conference was an encouraging and helpful experience. We greatly appreciated the privilege of sharing in a conference which faced so realistically and courageously the problems and difficulties of improved primary education. There is no doubt that this movement, begun in such an original and arresting manner by Mahatma Gandhi, is already a vigorous force. Any, who may have thought the efforts to establish basic schools rather tentative and uncertain, must surely have revised that opinion on hearing the exchange of experiences and the discussions of experts who are devoting all their powers to make it a success. Basic education is an important experiment in "New Education" and will surely have its contribution to make to the world's education reforms. It is destined to achieve growth and enrichment, as experience helps the leaders to develop and adopt the ideas.

An outstanding impression of the conference was its realistic character. Little time was given to theoretical argument or propaganda. There was an absence of the didactic notes. Instead the spirit of humble experimentation prevailed. The leaders constantly brought back attention to the necessity for the scientific attitude which patiently experiments and verifies. Basic education must develop by taking one step at a time and thorougly testing it by its effect upon the children in the social and physical condition of India today. The insistence of Shri Aryanayakam, the Secretary of the Hindustani Talimi Sangh, upon the keeping of accurate and detailed records in the training centres and in the basic schools is very important. The scientific attitude of the conference was also manifested in the frank statements of the great difficulties encountered in this new type of activity programme, and the technical problems of craft centred teaching. Administrative problems had their due share of attention,

but they did not overshadow the even more important problems of teaching methods. Teachers absorbed in their day-to-day teaching problems and the children's needs discussed these difficulties and techniques far into the nights when more popular sessions had finished. It is in such devoted, intelligent, self-critical teachers and trainers of teachers that the hope of basic education rests.

The Exhibition was a chief factor in establishing this spirit of thoroughness and experimentation. It was carefully organized and represented authentically the work of teachers in training, and of children in the new basic schools. Its variety was impressive, showing as it did, varied crafts and activities rich in suggestion of the diversity of Indian culture, products of children's work in baskestry, spinning, weaving, wool-carding from Kashmir, paintings of temples in the south, cut-outs on cardboard articles with beautiful Persian lettering from Jamia Millia Islamia of Delhi, and brilliant Kashmiri papier mache. Very interesting and helpful were the crafts from the various training centres, showing graphically the life and activities of these new-type normal schools, and records of skill and accomplishment in the crafts of spinning, cardboard construction, wool-work etc.

It seemed to us that the most valuable feature of the conference was found in this very quality of variety. In the discussions, conflicting points of view were freely expressed. All constructive contributions were welcomed; for lack of time, all could not be fully discussed. Different lines of experimentation are being carried out by experienced educators. We are glad that such differing applications of the "basic" idea are being developed and hope that the movement may continue to keep within its ranks educators who see its problems from different view-points. Thus rigidity and standardization will be avoided, and the free spirit of search for truth will be preserved. The services of many able psychologists and progressive educators are enlisted in the service of basic education, who will soon produce materials for the guidance of teachers and trainers of teachers.

Of the main topics discussed, none aroused more interest and intelligent discussion among the basic teachers than the problem of correlation. Just how the craft is to become the

centre of the teaching and just how the essential knowledge and skills of the primary stage of education can be derived from the craft activity, is the basic problem of craft-centred teaching. Perhaps it will not be presumptuous for us, who have been experimenting for some years with activity centred teaching in rural schools, to make some suggestions along this line. Our work has been in the Training School for Village Teachers, Moga, and in many village schools of the Punjab where our graduates and others are teaching. The method of our activity programme has been teaching "projects" chosen by the pupils from their interests in the physical and social environment. But there is no reason why similar projects should not be centred in a basic craft, and indeed we hope our school will make some experiments along this line. At any rate, both the basic craft and the project method are in essence activity-centred methods and each may surely learn from the other.

Some speakers at the conference wisely emphasized that correlation must not be made an end in itself. This cannot be too often emphasized. Most teachers will be so eager to bring into relation with the craft activity all the usual subject-matter of the curriculum, that they will produce a forced and artificial correlation. This should never be allowed. Merely phrasing arithmetic problems in terms of the craft processes, or setting essay subjects related to the activity is not true correlation. What is necessary is that the children in carrying out their activity should be led to sense a real need for some number calculations, for self-expression in writing, or for facts in science or history or geography, and should be helped by the teacher to supply these needs. This is natural correlation. The skillful teacher will find many such opportunities to relate learning to felt needs as discovered in the craft activity. But there will be many facts and processes necessary for the child's education which are not naturally related to a single basic craft, not even to a chosen activity or project. The teacher must not force a correlation where none exists. He must provide for these other learnings through another centre of interest.

On the other hand, it is well for the curriculum makers to consider whether all the traditional subject matter is really

essential. It may be true that the children do not need the facts and skills which are not related to their activity. If the activity of the children is chosen with due regard to their experience, interest and needs, it may well prove to be a coordinating centre for rich and vital learning. With such a centre of interest, a skilful teacher is able to teach thoroughly all that is necessary for the child's education at that stage. This has been proved in many Indian schools which have been using activity methods. These practical experiences suggest the following experiment for basic schools: According to the basic syllabus, three coordinating centres are found within the curriculum: the physical environment, the social environment and the craft which unites them both. Why should not a centre of interest be chosen in each class which would co-ordinate the three phases? For instance, if the basic craft is agriculture, such units as "The Garden," "Bread," "Farm Animals," "Our Food," "Trees," "The Farmer and his Work," could be chosen. They would supply the motive for systematic practice of the skills of the craft and develop needs for language, science, arithmetic and social studies. Similarly, if the basic craft is spinning and weaving, such units as "Cotton," "Our Clothing," "The Charkha in National Life," etc. would be interesting co-ordinating centres.

Whatever means of co-ordination is found, the basic necessity of arousing the children's interest and developing ability to choose and plan their work must not be neglected. We have a much better chance to do this in craft-centred teaching than in the traditional type of primary school. Children are active by nature. Nothing was more impressive at the conference than the consensus of testimony to the interest and pleasure shown by even young children in the activities of basic crafts. Fatigue must be avoided, and attention given to personality development; but it will probably be found in the end that these matters can be better cared for in the craft-activity school than in the old, dull, repressive type of education.

In closing, we may say again that it was a great privilege to share in this epoch-making conference. Basic education is indeed, as the President of the Conference Mr. K. G. Saiyidain called it, "the greatest educational crusade of the age."

PART III
THE EXHIBITION

THE EXHIBITION OF BASIC EDUCATION—ITS POSSIBILITIES AND ACHIEVEMENTS

By Asha Devi

The exhibition of Basic Education had been planned as an organic part of the conference and not as an appendage to it.

The conference was meeting after a year and a half of practical work in the field of basic education. During this period an attempt had been made to translate a new educational philosophy into educational practice. It had been a difficult process as there was nothing in the way of previous educational experience to guide the experiment and the workers had to break new ground at every step. There were many problems of a practical nature that needed to be solved and questions that needed to be answered. The workers of basic education had felt therefore that it would be helpful at this stage if they could meet together for a collective discussion of these problems and questions, learn from each other's experience, and make a collective attempt towards the solution of these problems and formulate certain findings for the guidance of their future work.

But while there had been difficulties and problems in the practical working out of this new scheme of education, there had also been achievements, however modest, and new discoveries. Fourteen training centres and a number of basic schools had been started in different parts of India. In these centres both teachers and children were working with their hands, systematically and scientifically, as a part of their educational process and were discovering with joy that work transformed by knowledge and discipline was the most primary and satisfying form of human expression and the greatest medium of education provided by man and nature. They were also producing things both useful and beautiful (yarn and cloth and articles of cardboard, wood or paper) in quantities that were already a nightmare to the authorities who

were to solve the problem of their consumption. A new educational technique of knowledge through productive and useful work was being slowly built up from day to day experience in these training schools and basic schools; a new educational literature and ideology was in the process of evolution.

Besides, the village child had at last come into its own in the field of national education and had become the starting point and the centre of all educational experiments and efforts. His needs and his little world had become a subject of serious study and was proving to be a wide field of discoveries, social, economic, cultural and educational.

The exhibition of basic education was therefore planned as a systematic and representative record of these achievements and discoveries—a silent but effective complement to the oral discussions and the papers read at the conference.

A tentative plan of the exhibition as a whole was therefore drawn up and circulated to all institutions and individuals engaged in the practical working out of the basic education and inviting their co-operation. The plan was to record through charts, graphs and posters products of the work of teachers and children in training schools and basic schools, and represent as completely as possible the experience gained to date in the practical working of basic education in all its aspects, administrative, economic and educational. The exhibition was divided into two main sections: (1) the training of teachers, (2) the education of children around the basic craft.

The training centres of basic education were requested to prepare and contribute the following records of their work and experience to the exhibition.

Educational: The syllabus and programme of work as planned for the period of training; the daily programme of work; extracts from the notes of lessons prepared by the staff of the training centre; extracts from the notes of lessons as prepared by the pupil teachers; extracts from records and diaries maintained by the staff of the training centre; extracts from the criticism notes of the training centre on the practice teaching of the pupil teachers; records of craft work (both daily and periodical) as maintained by the craft experts on

the staff of the training centre, and by the pupil teachers; progressive records of craft work by pupil teachers during an entire period of training (both quantitative and qualitative) including records of wastage; progressive health records of pupil teachers (including diet charts); specimens of illustrative material, reading material and teaching aids, prepared by the staff and pupil teachers of the training centres; accounts of extra-curricular activities or hobbies pursued by the staff or students of the training centre; efforts, if any, of the training centre on the environment; the system of examination followed and the standard fixed for certifying the last batch of pupil teachers; the standard followed in the selection of pupil teachers; arrangements, if any, for following up the work of the pupil teachers in their actual work after they leave the training centre; arrangements for practice teaching and the time devoted to the practice teaching by each pupil teacher; arrangements for extra-moral lectures to increase the general cultural back-ground of the teachers.

Administrative: The history of the training centre, if any; details regarding the principal, staff, and organization of the training centre; the relation of the training centre to the Department or the Board of Basic Education, or both; the distribution of administrative and other duties among the principal and staff of the training centre; the actual expenses of a complete course of training, including building, equipment, salaries of staff and menials, arrangements for the board and lodging of the pupil teachers etc.; the relation of the training centre to the experimental area where the pupil teachers work.

Economic: The actual expenses on raw material equipment etc. for the period of training per group; per pupil teacher; the net income of craftwork; the earnings per pupil teacher; wastage.

The basic schools, and the individuals and bodies responsible for their working were similarly requested to prepare and contribute information regarding the following aspects of the experiment:

The programme of work as planned for one year round a selected basic craft; weekly and monthly programme of work; the school time-table; specimens of tested correlated

teaching in the basic schools; extra-curricular activities of teachers and children; craft records of children and teachers; specimens of children's work such as (a) craft-work, (b) drawings and decorations, (c) written work, (d) specimens collected for the museum etc.

Besides the above-mentioned details regarding the working of the schools, the basic schools and their teachers were requested to collect and contribute to the exhibition the following details regarding the village child and his environment:

Economic charts regarding the yearly income and expenditure of the families of the children; social charts regarding the castes and profession of the families of children attending school with particular details regarding the problem of untouchability in the village and the school; diet charts giving details regarding the average diet of the school children; charts giving detailed information of the health, cleanliness and attendance of the school children; percentage of boys to girls attending school; reasons for their non-attendance; occupations and average earnings of children when not attending school; relation of the school and the village, the basic school teacher and the village; effect of the basic school, if any, on the life of the village.

Besides these details, the administrative authorities were requested to supply the following information:

Total expenditure of a basic school including building equipment, teachers' salaries, arrangements for water, meals, recreation, if any; comparison with expenses on present primary schools; comparative figures showing expenses incurred on starting new schools and converting old ones; the total expenditure on a compact area; comparison with figures under the existing system; figures of expenditure and income per basic craft, per school, per compact area; organization for the disposal of the products of basic schools; organization and expenses of supervision; the relation of the school to the local authorities, to the education department and, in the case of a private experiment, to the controlling body.

It was hoped that through these records it would be possible to obtain a fairly complete picture of the working of basic education in the training schools and basic schools, of

the village child, his needs and his environment, and the possibilities inherent in the productive aspect of the scheme.

The response to the invitation was encouraging. Thirteen training centres* with the attached practising schools, Private Basic Schools† and Basic Schools opened by the provincial Governments and States‡ were represented in the exhibition.

The exhibition was thus not only geographically representative of practically the whole of India, educationally it was representative of all types of institutions and activities. In variety and quantity, it was a most challenging evidence of the prolific vitality of the new scheme. Charts, graphs and posters with specimens of teaching aids, illustrative and reading material and craft equipment filled the walls and the tables of the main hall of the Conference and overflowed into another wing. The most predominant note of the exhibition was that of productive activity—yarn and cloth and carded

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* TRAINING CENTRES

1. Jamia Milia Islamia, Delhi.
2. Basic Training School, Srinagar.
3. Basic Training College, Allahabad.
4. Basic Training School, Patna.
5. Basic Training School, Bari.
6. B. T. S. Loni.
7. " Dharwar.
8. " Katargaon.
9. " Jalgaon.
10. Vidyamandir Training Institute, Wardha.
11. V. M. Training School, Wardha.
12. National College, Masulipatam.
13. Vedchhi Ashram.

† PRIVATE BASIC SCHOOLS

1. Rashtriya Gramshala, Thamna.
2. Basic School, Segaon.
3. Primary School, Jamia Milia Islamia, Delhi.
4. Vijay Vidyamandir, Rajpipla.
5. Basic School, Gandhi Ashram, Meerut.

‡ GOVT. BASIC SCHOOLS

1. Basic School, Jammu.
2. Vidyamandirs of C. P.
3. Compact area Bettiah thana, Champaran, Bihar.
4. 5, 6 and 7. Compact areas of Bombay Presidency.

cotton; articles of paper, cardboard, wood and leather; miscellaneous products of leisure hours or hobbies—simple things of beauty made out of waste material or raw material available in the villages, together with the necessary raw material and tools used in the process of production—formed the nucleus of the exhibition round which the rest of the exhibition was arranged. There was undoubted evidence that this new experiment has achieved its purpose, has set hands working and minds thinking, and this combined process formed the process of education.

Another refreshing aspect of the exhibition was a conscious striving towards not only the 'useful' but also the 'beautiful' in productive work. Professor Lethaby speaking of the great service of William Morris has said that art was more than picture-painting and that it should properly mean all hand-work done with interest and care for quality. "Art is competent and mostly work. Beauty is not some strange phenomenon only to be attained by a genius in a dream, it is present in its due degree in all happy skilful craftsmanship. Further, 'design' is not some strange contortion of a useful thing into a freak, it is, properly, the arranging how reasonable work may be rightly done." This quality of beauty, i.e. care and quality in craftsmanship was present in nearly all the work exhibited.

There was more. Self-expression through art was an essential part of the syllabus of the basic education both for teachers and children, complementing or rather completing self-expression through productive activity. So far this aspect of the experiment had not been emphasized in the other institutions but the Basic Training College at Allahabad, under the enthusiastic direction of Dr. I. R. Khan, had taken the initiative in this direction and done valuable pioneering work. This institution therefore made an unique contribution to the exhibition. They exhibited specimens of free expression in art paintings, design and decoration, experiments in pottery, printing, cardboard work—the work of teachers and children of the Training College and Practising School with the aid of the simplest and cheapest equipment and material. This proved that art education was not an expensive hobby or accomplishment, but an essential part of

the education of teachers and children, a natural expression of their daily life and activities. It further proved that it could be introduced in every village school in India with very little expense and with the simplest and cheapest of local material and equipment.

The purely technical aspect of the craft records and craft work exhibited will be dealt with in another article. The general effect of the exhibition as a whole was that it was a picture, however imperfect, of an attempt towards a complete all-round education for children through productive work, "touched by beauty and transformed by knowledge", and also incidentally of the re-education of adults who were being trained as teachers of basic education. The experiment was yet in the initial stage and suffered under handicaps both psychological and material, yet the beginning had been made and the first step taken in the right direction. It was certainly a record of 'one step forward' in the experiment of basic education.

It is also necessary for us workers to remember where the exhibition failed of its purpose. The exhibition was good, it was an inspiring record of the experiment of basic education in its various aspects, yet it has to be admitted that technically and aesthetically it fell short of the ideal. The technical aspect of exhibition as a means of education has yet to be evolved and perfected in this country through repeated experiments and mistakes. We have yet to learn to combine brevity and scientific accuracy with effectiveness. We are lacking in a sense of proportion. The aesthetic standard of our work also has to be raised from day to day and year to year through repeated efforts towards that ideal where beauty is not an external appendage, but an inherent quality of the work itself.

Another essential condition that has to be fulfilled if the exhibition is to achieve its purpose is disciplined co-operation. A common plan has to be prepared by common consent and once accepted must be adhered to, if the exhibition is to be a complete whole.

There are a few suggestions towards a progressive evolution of educational exhibitions. This is a subject that needs the serious consideration of workers of basic education.

Museums and exhibitions have been used successfully in other countries as an effective medium of education and should be developed in this country also if our objective is free and compulsory education for all.

For lack of space the main hall of the Conference had also to serve the purpose of an exhibition hall. This proved to be a fortunate accident. For three days of the Conference we worked and discussed the problems of basic education surrounded by this silent Conference, inspiring us with the record of work already done and pointing the way towards future fulfilment.

THE SIGNIFICANCE OF CRAFT RECORDS

By Sjt. Vallabhbhai Patel, of Nalwadi.

The craft is the most important focus in basic education. Whether education can be made self-supporting or not, whether it should be self-supporting or not, is a matter of controversy, but if we accept the craft as a medium of education, there can be no controversy as to the fact that the craft is the acid test of that education. An educational craft must be considered from many aspects, of which craft records is only one. It will be useful to examine the significance of the records shown in the exhibition here.

Many institutions have displayed their records in the Poona Exhibition. It is difficult to study these minutely for many reasons. However, I am giving some important records below:

Record I

Parola Division (Khandesh), August 1939, Grades I and II

Ser. No.	Name of School	No. of students	Av. hrs. of work per child	Goondis	Yarn Weight Srs.	Yarn Weight Tolas	Wages R.	Wages A.	Wages P.	Per child Rounds	Per hr. Earnings
1.	Undirkhedai	66	52½	131¼	5	72	5	2	3	24	2/7 pie
2.	,, (Urdu)	24	66	42½	1	60	1	14	3	17	3/13 ,,
3.	Shevagai	37	55½	82½	3	74	3	11	6	26	8/23 ,,
4.	Mhasavai	52	49½	131½	6	57	4	15	9	32	3/8 ,,
5.	Devgaon	51	42	85	4	14	3	15	9	25	5/14 ,,
6.	Modhalai	15	52½	35¾	2	..	1	7	0	29	7/20 ,,
7.	Mahalpur	19	37	23¾	1	5	1	7	3	21	2/5 ,,
8.	Bichkhedai	14	57½	42½	2	20	1	14	0	34	4/9 ,,
9.	Toli	19	54	51½	1	72	2	9	9	32	1/2 ,,
10.	Hanumantkhedai	12	48½	58½	3	21	3	2	0	64	1 ,,
11.	Mehutehu	23	55½	67½	3	58	3	0	6	34	5/11 ,,
	Total	332	574	752	36	55	33	4	0	338	4.72
			574/11 = 52							338/11 = 31	4.72/11 = .43

Record II

Valod Division (Gujarat)

Month	No. of Students	Average Attendance	Av. earnings per pupil as. p.
July	486	393	1 3
August	490	357	1 7
September	497	379	1 11

Note: The average daily time devoted to spinning was two hours. The children were below eight or between eight and nine years of age. They had no previous knowledge of spinning. The work was begun in the middle of June.

Record III

Dharwar Division (Karnatak), Grades I & II

No. of students	384
Average attendance	280
Working hours per student	216
Yarn produced:	
Goondis	3,164$\frac{1}{4}$
Weight	138 srs. 66 tolas
Income	Rs. 134-15-3
Income per child	7 as. 8$\frac{1}{4}$ pies
Per child per hour:	
Rounds	33$\frac{1}{4}$
Earnings	.43 pies
Percentage of wastage	11%

Record IV

Loni (Poona) Practising School, Grade I
Average Speed in half an hour

Month	Left hand	Right hand	Speed per hour alternate spinning
July	18	12	30
August	19	18	37
September	25	22	47
October	25	32	57
			171

$$\frac{171}{4} = 43$$

Let us examine the above records minutely. In keeping spinning records the following important points should be noticed:

1. Work, 2. Earnings, 3. Wastage, 4. Any special feature —speed etc.

Work:

In Parola the average rate of spinning was 31 rounds per hour, and in Dharwar 33. The average revealed by the speed test in Loni Practising School was 43 rounds per hour, but since this was the speed test, the average output will be somewhat less than this. However, it should be about 40 rounds per hour.

Since the records for Parola and Valod are the records for the second month, the speed will naturally increase.

In the syllabus an average output of 40 rounds per hour is demanded for the first half-year.

Earnings

In the parola and Dharwar schools the average earnings per pupil are .43 pies per hour per child. In the syllabus the average working hours are reckoned as 72 per month. If we multiply .43 pies by 72 hours, we get 31 pies or 2 as. 7 pies per month. From this calculation, we find that the earnings for the first six months are 15 as. 6 pies.

The earnings of the Valod District were for 2 hours' spinning per day. In the syllabus we have reckoned 3 hours per day, so we have to multiply by 1½. By so doing, we find:

	As.	Pies.
July	1	10½
August	2	4½
September	2	10½
	7	1½

From the above record we can see that the earnings increase by 6 pies per month. If the earnings continue to increase *at least* at that rate, during the following three months the figures should be as under:

	As.	Pies.
October	3	4½
November	3	10½
December	4	4½
	—	—
	11	7½

If we combine the above records, the total income for the first six months will be Re. 1-2-9. In the syllabus earnings for the first six months were expected to be Re. 1-0-6.

Wastage:

The only records of wastage shown are for the Dharwar Division. There the wastage was 11%. That is more than the wastage allowed for in the syllabus. In Valod they have allowed a wastage of 2½%, and deducted the wastage in excess of this percentage from the earnings.

Special features:

The record kept at Loni are useful because they show the progress made with both the right and left hands.

Usually we do not pay sufficient attention to the work of the left hand. We have supposed that there will be no progress in spinning or in any other work with the left hand. But the Loni records prove that if attention is paid to the work of the left hand, ample progress can also be made with this. For the first three months the speed of spinning with the left hand was higher than with the right. After that the speed of the right hand was higher. Granted that ultimately the speed of spinning with the right hand will be greater than with the left, still in order to develop the general skill of the left hand stress must be laid on spinning with the left hand.

Thus we can draw the following conclusions from the above records:

1. The requirements of the syllabus regarding output can be fulfilled.

2. The requirements of the syllabus regarding earnings can be fulfilled.

3. More care must be taken if wastage is to be reduced to the percentage allowed in the syllabus.

4. Every attempt must be made to carry out the suggestion of spinning with both hands alternately, and other suggestions made in the booklet Mul Udyog Katna, for by following these we can discover the hidden possibilities of the craft of spinning.

5. *Necessity of appointing a special craft supervisor*:

The fifth point has no direct connection with the records but it is none the less worth consideration. All the above records are from the basic schools of the Bombay Presidency. Basic schools are functioning in many provinces of India. Then why have we not got similar results in other provinces? While thinking over this question, I find one special feature about the basic schools of Bombay Presidency, which I think has played an important part in the above statistics viz. the appointment of a craft supervisor for each compact area. In the ideal stage there should be no necessity for a separate craft supervisor, but in the initial stage, while our present-day teachers and inspectors are not expert in the craft, it will be useful to have special craft supervisors.

I have given above a brief resume of the results shown by the charts displayed at the Poona Exhibition.

APPENDIX

List of Delegates and Visitors present at the Basic National Education Conference at Poona, 1939.

GOVERNMENT DELEGATES

Bihar

1. Shri Shivkumarlal, Basic Training School, P. O. Mahendru, Patna.
2. „ Dwvarka Singh, Basic Training School, Patna.
3. „ Narayan Chowdhury, Basic Training School, Patna.
4. „ Pandey Jadunandan Prasad, Asst. Head Master, Basic Training School, Patna.
5. „ Rao Saheb Pt. Ramsaran Upadhyaya, Secretary, Board of Basic Education, Bihar, and Headmaster, Basic Training School, Mahendru.
6. Mr. Seriyal Hoda, Supervisor, Basic Schools, Brindavan.
7. „ A. Samad Khan, Science College, Patna.

Bombay

INSPECTING STAFF

1. Shri S. S. Alagawadi, Second Supervisor, Dharwar District.
2. „ B. A. Kanse, Supervisor, East Khandesh District.
3. „ G. L. Kini, Craft Supervisor, Dharwar District.
4. „ J. O. Kanuga, Basic Supervisor, Surat District.
5. „ B. N. Patel, Craft Supervisor, Surat District.
6. „ Y. R. Phatak, Basic Supervisor, Satara District.
7. „ V. D. Patki, Craft Supervisor, Satara District.
8. „ B. N. Shintri, Basic Supervisor, Dharwar District.
9. „ R. N. Upadhye, Craft Supervisor, Dharwar District.

TEACHING STAFF

1. Dr. Abdul Hamid Kazi, Headmaster, Urdu Training Centre, Jalgaon, E. Khandesh.
2. Mr. F. G. Alim, Asst. Headmaster, Urdu Training Centre, Jalgaon, E. Khandesh.
3. Shri D. R. Derasari, Headmaster, Basic Training Centre, Katargam.
4. „ O. K. Deshmukh, Asst. Spinning Expert, Basic Training Centre, Loni.

5. Shri V. D. Desai, Asst., Basic Training Centre, Katargam.
6. ,, M. J. Dave, Asst., Basic Training Centre, Katargam.
7. ,, R. V. Desai, Asst., Basic Training Centre, Dharwar.
8. Mrs. K. Kanetkar, Basic Training Centre, Loni.
9. Shri M. V. Kelkar, Spinning Expert, Basic Training Centre, Loni.
10. ,, G. V. Khare, Spinning Expert, Basic Training Centre, Katargam.
11. ,, S. K. Mohite, Basic Training Centre, Loni.
12. Mr. S. K. Mohamad Abdul Gafoor, Spinning Expert, Urdu Basic Training Centre, Jalgaon.
13. Shri G. M. Nyamti, Spinning Expert, Basic Training Centre, Dharwar.
14. ,, M. S. Nimbkar, Head Master, Basic Training Centre, Loni.
15. ,, T. F. Panwala, Asst., Basic Training Centre, Katargam.
16. ,, S. V. Subedar, Asst., Basic Training Centre, Loni.
17. Mrs. Shakuntalabai Nandwar, Asst., Basic Training Centre, Dharwar.
18. Shri S. R. Tatti, Head Master, Basic Training Centre, Dharwar.
19. ,, K. B. Tergaonkar, Asst., Basic Training Centre, Dharwar.
20. Mr. S. B. Wahidi, Asst., Urdu Basic Training Centre, Jalgaon.

Central Provinces

1. Shri M. A. Bombawala, District Inspector of Schools, Wardha.
2. ,, S. C. Dikshit, Vidya Mandir Training School, Wardha.
3. Mr. E. W. Franklin, Principal, Vidya Mandir Training Institute, Wardha.
4. Rao Saheb T. B. Jog, Vidya Mandir Training Institute, Wardha.
5. Rao Saheb D. K. Mohoni, Officer on Special Duty, Education Department, Nagpur.
6. Shri Lakshmishwar Sinha, Craft Superintendent, Vidya Mandir Training Institute, Wardha.
7. ,, N. N. Sil, Organising Officer, Vidya Mandir Scheme, Education Department, Nagpur.
8. ,, Uttam Singh Tomar, Superintendent, Vidya Mandir Training School, Wardha.

Madras

1. Shri D. S. Reddy, Deputy Director of Public Instruction, Madras.
2. „ M. S. Sundereswaram, Head Master, Government Basic Training School, Coimbatore.

N. W. Frontier Province

1. The Hon'ble Attaullah Khan, Minister for Education.
2. The Director of Public Instruction.

Orissa

1. Shri Gopabandhu Chowdhury, Chairman, Basic Education Board, P.O. Bari-Cuttack, Dist. Cuttack, Orissa.
2. „ Saratchandra Maharana, Secretary, Basic Education Board, P. O. Bari-Cuttack, Orissa.
3. „ Kishore Chandra Pande, Basic Training School, Bari, Dist. Cuttack.
4. Shri M. S. Pradhan, Principal, Teachers' Training College, Cuttack.

U.P. Government

1. Shri D. N. Chaturvedi, Basic Training College, Allahabad.
2. Dr. N. R. Dhar, Deputy Director of Public Instruction, Allahabad.
3. Mr. Mirza Samsul Hasan, Basic Training College, Allahabad.
4. Dr. I. R. Khan, Principal, Basic Training College, Allahabad.
5. Shri Manohar Lal, Basic Training College, Allahabad.
6. Shri B. P. Srivastava, Basic Training College, Allahabad.

DELEGATES FROM NATIVE STATES

Aundh State

1. Shree Rajkumar Appa Saheb Pant.
2. Shree Bharatananda.
3. Sri D. V. Kulkarni, Pramukh Sanchalak, Aundh State.

Kashmir State

1. Shri Mohinder Singh, Head Master, Basic School, Jammu.
2. Mr. G. A. Mukhtar, Basic Training School, Shrinagar.

Private Delegates

Delegates from Institutions recognized by the Hindustani Talimi Sangh.

1. Shri Ranjeet Chetsingh, Friends Settlement, Rasulia, Hoshangabad.

2. Shri Jugatram Dave, Swaraj Ashram, Vedchhi, P. O. Valod, Dist. Surat. (Training Centre, Valod).
3. „ Babalbhai Mehta, Rashtriya Gramshala, Thamna, Dist. Kaira.
4. Shri L. Rajgopalrao, Principal, Basic Training Centre, Andhra Jatheeya Kalashala, Masulipatam.

Hindustani Talimi Sangh Delegates

1. Shri V. V. Atitkar, Registrar, Tilak Maharashtra Vidyapith, Poona.
2. „ Shreekrishnadas Jaju, Wardha.
3. Dr. Abid Husain, Jamia Millia Islamia, Delhi.
4. „ S. Jesudasan, Christukula Ashram, Tirupattur, N. Arcot Dist.
5. Shri J. C. Kumarappa, Secretary, A. I. V. I. A., Maganwadi, Wardha.
6. Smti. Rajkumari Amrit Kaur, Manor Villa, Simla.
7. Shri Kakasaheb Kalelkar, Wardha.
8. „ J. B. Kripalani, Secretary, A. I. C. C.
9. Prof. M. Mujeeb, Jamia Millia Islamia, Delhi.
10. Shri Narahari Parikh, Harijan Ashram, Sabarmati, Gujarat.
11. Prof. K. G. Saiyidain, Director of Education, Kashmir.
12. Smti. Asha Devi, Asst. Secretary, Hindustani Talimi Sangh, Segaon, Wardha.
13. Shri E. W. Aryanayakam, Secretary, Hindustani Talimi Sangh, Segaon, Wardha.

Workers

1. Shri Nihar Ranjan Chowdhury.
2. „ Kunder Diwan, Satyagraha Ashram, Nalwadi, Wardha.
3. „ Vallabhbhai Patel, P. O. Paunar, Wardha.
4. „ Balraj Sahni, Segaon, Wardha.
5. „ Satyavratan, Satyagraha Ashram, Nalwadi, Wardha.

Jamia Millia

1. Mr. Fazluddin Asar.
2. „ Bayad Ahmad Ali.
3. „ Syeed Viqar Azeen.
4. „ Abdul Hai.
5. Mr. Urijal Hasan.
6. „ Miruddin Qadfu.

Visitors

Members of Kher Committee,

1. Mr. Armstrong, D.P.I. Punjab.
2. The Hon. Pir Illahi Bakhash, Prime Minister, Government of Sind.

3. Mr. Jenkins, Director of Public Instruction, Bengal.
4. „ John Sargent, Educational Commissioner with the Government of India, New Delhi.
5. Dr. Amarnath Jha, Vice-Chancellor, Allahabad University.

Members of the Basic Education Advisory Board, Bombay.

1. Shri Bhagwat, Saswad, Poona.
2. „ S. R. Bhise, Hakimji High School, Bordi.
3. „ Maganbhai Desai, Gujarat Vidyapith, Ahmedabad.
4. „ Diwarkar, Hubli.
5. Smti. Indumati Chimanlal Sheth, Ahmedabad.
6. Shri Yashwant Ramakrishna Saraf, Vice-Chairman, School Board, Amalner.

Visitors & National Institutions.

1. Shri Dilkush Diwanji, Gandhi Kutir, Surat.
2. Mrs. N. R. Dhar, Allahabad.
3. Shri Bhogilal Maganlal Gandhi, Vijay Vidya Mandir, Avidha, Rajpipla State.
4. „ Mishri Lal Gupta, Dayal Bagh, Agra.
5. Mrs. A. E. Harper, Training School for Village Workers, Moga, Punjab.
6. Rev. A. E. Harper, Training School for Village Workers, Moga, Punjab.
7. Rao Saheb P. A. Inamdar, Director of Public Instruction, Idar.
8. Shri D. V. Kulkarni.
9. Shri Gopal Ramchandra, Kulkarni Vijay Vidya Mandir, Avidha, Rajpipla State.
10. Dr. G. V. Krishnaian, Vice Principal, Kolhapur, Training College.
11. Shri Kuppuswami Iyengar.
12. „ A. Karan, Gandhi Ashram, Meerut.
13. Dr. Bharathan Kumarappa, Asst. Secretary, A. I. V. I. A., Maganwadi, Wardha.
14. Shri Dhirendra Muzumdar, Gandhi Ashram, Meerut.
15. Professor Malkani, Principal, Teachers Training College, Benares.
16. Shreemati Rajkumari Akkasaheb Pant.
17. Shri Manubhai B. Patel, Vithal Kanya Vidyalaya, Nadiad, Gujarat.
18. „ Y. N. Parnekar, Segaon.
19. Miss A. M. Peterson, Seva Mandir, Porto Novo.
20. Prof. Parsram, Forman Christian College, Lahore.
21. Shri S. Pathik, Gandhi Ashram, Meerut.

22. Shri Rajnayakam, London Mission Community Training School, Erode. (S. I.).
23. Dr. Rajaratnam, Christukula Ashram, Tiripattur, N. Arcot.
24. Smti. Subhadra C. Shroff, Vithal Kanya Vidayalaya, Nadiad.
25. „ Mridula Sarabhai, The Retreat, Shahibag, Ahmedabad.
26. Mrs. Hannahsen, Principal, Lady Irwin College, Delhi.
27. Shri Seshachalam, Editor, 'Educational India,' Masulipatam.
28. „ Kashinath Trivedi, Vyavasthapak, Mahila Ashram, Wardha.

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